100 105 110

Phe Ala Ile Lys Thr Arg Met Leu Phe Leu Pro Cys Ser Asp Asn Val 115 120 125

<210> 3211

<211> 757

<212> PRT

<213> Homo sapiens

<400> 3211

Met Gln Lys Ser Leu Arg Pro Ile Gly Leu Leu Arg Ala Gln Ser Leu

1 5 10 15

Glu Trp Phe Tyr Asn Asn Val Lys Ser Arg Phe Glu Arg Phe Gly Ser
20 25 30

Ala Lys Val Leu Lys Asn Leu Tyr Arg Lys His Arg Leu Glu Ser Gly
35 40 45

Ala Cys Phe Asp Ile Leu Gly Gly Ser Leu Phe Glu Ser Asn Leu Glu
50 55 60

Asn Glu Gly Ser Ile Ser Gly Ser Asp Ser Thr Phe Tyr Arg Gln Ser 65 70 75 80

Glu Gly His Ser Val Met Asp Thr Leu Ala Val Ala Leu Arg Val Ala 85 90 95

Glu Glu Ala Ile Glu Glu Ala Ile Ser Lys Ala Glu Ala Tyr Gly Asp 100 105 110

Ser Leu Asp Lys Gln Asn Glu Ala Ser Tyr Leu Arg Asp His Lys Glu
115 120 125

Glu Leu Thr Glu Glu Leu Ala Thr Thr Ile Leu Gln Lys Ile Ile Arg .130 135 140

Lys	Gln	Lys	Ser	Lys	Ser	Glu	Gln	Gln	Val	Glu	Glu	Glu	Pro	Gly	Trp
145					150					155					160
Pro	His	Pro	Gln	Ser	Cys	Ser	Thr	Lys	Val	Ala	Asp	Glu	Gly	Thr	Ser
				165					170					175	
Ala	Ser	Pro	Gly	Gly	Tyr	Arg	Ala	Pro	Ala	Ala	Leu	Trp	Arg	Ser	Gln
			180					185					190		
Ser	Ala	Phe	Ser	Ile	Thr	Gly	Glu	Glu	Ala	Leu	Lys	Thr	Pro	Pro	Val
		195					200					205			
Glu	Ala	Pro	Ser	Arg	Gln	Pro	Arg	Asp	Gln	Gly	Gln	His	Pro	Arg	Ala
	210					215					220				
Glu	Ser	Ala	Leu	Pro	Ser	Trp	Lys	Ser	Val	Asp	Arg	Leu	Asp	Glu	Thr
225					230					235					240
Asn	Leu	Ala	Pro	Val	Leu	Gln	Ser	Pro	Asp	Gly	Asn	Trp	Val	Ala	Leu
				245					250					255	
Lys	Asp	Gly	Ala	Pro	Pro	Pro	Thr	Arg	Leu	Leu	Ala	Lys	Pro	Lys	Ser
			260					265					270		
Gly	Thr	Phe	Gln	Ala	Leu	Glu	Val	Ala	Ser	Ser	Val	Ala	Ser	Ala	Tyr
		275					280					285			
Asp	Glu	Met	Gly	Ser	Asp	Ser	Glu	Glu	Asp	Phe	Asp	Trp	Ser	Glu	Ala
	290					295					300				
Leu	Ser	Lys	Leu	Cys	Pro	Arg	Ser	Arg	Ala	Leu	Pro	Arg	Asn	Pro	Glr
305					310					315					320
Pro	Gln	Pro	Thr	Gln	Ala	Gln	Ser	Ser	Asp	Gln	Gly	Pro	Ile	Ala	Ala
				325					330					335	
Ser	Pro	Ser	Ser	Ala	Leu	Ser	Pro	Asn	Pro	Glu	Ala	Met	Cys	Ser	Asp
			340					345					350		
Ser	Glu	Thr	Ser	Ser	Ala	Gly	Ser	Ser	Arg	Glu	Val	Gly	His	Gln	Ala
		355					360					365			
Arg	Leu	Ser	Trp	Leu	Gln	Arg	Lys	Ala	Pro	Arg	Asn	Pro	Ala	Ala	Glu

	370					375					380				
Lys	Met	Arg	Leu	His	Gly	Glu	Leu	Asp	Val	Asn	Phe	Asn	Pro	Gln	Leu
385					390					395					400
Ala	Ser	Arg	Glu	Thr	Ser	Asp	Ser	Ser	Glu	Pro	Glu	Glu	Ala	Pro	His
				405					410					415	
Thr	Thr	Asp	Arg	Arg	Ala	Arg	Arg	Trp	Arg	Arg	Ala	Arg	Leu	Gly	Ser
			420					425					430		
Glu	Glu	Pro	Ser	Lys	Glu	Pro	Ser	Ser	Pro	Ser	Ala	Gln	Leu	Arg	Asp
		435					440					445			
Leu	Asp	Thr	His	Gln	Val	Ser	Asp	Asp	Leu	Ser	Glu	Thr	Asp	Ile	Ser
	450					455					460				
Asn	Glu	Ala	Arg	Asp	Pro	Gln	Thr	Leu	Thr	Asp	Thr	Thr	Glu	Glu	Lys
465					470					475					480
Arg	Arg	Asn	Arg	Leu	Tyr	Glu	Leu	Ala	Met	Lys	Met	Ser	Glu	Lys	Glu
				485					490					495	
Thr	Ser	Ser	Gly	Glu	Asp	Gln	Glu	Ser	Glu	Pro	Lys	Thr	Glu	Ser	Glu
			500					505					510		
Asn	Gln	Lys	Glu	Ser	Leu	Ser	Ser	Glu	Asp	Asn	Ser	Gln	Ser	Val	Gln
		515					520					525			
Glu	Glu	Leu	Lys	Lys	Lys	Phe	Ser	Ala	Val	Ser	Leu	Cys	Asn	Ile	Ser
	530					535					540				
Thr	Glu	Val	Leu	Lys	Val	Ile	Asn	Ala	Thr		Glu	Leu	Ile	Ala	Gly
545					550					555					560
Ser	Thr	Gly	Pro	_	Glu	Ser	Pro	Gln		Pro	Pro	Asp	Arg		Lys
				565					570					575	
Gly	Met	Phe		Arg	Gly	Thr	Asp		Val	Arg	Leu	Asp		Gln	Leu
mı.	•	_	580				_	585			٥.		590	_	
Thr	Ser		Glu	Glu	Asn	Val		Leu	Ala	Ala	Gly		Val	Tyr	Gly
		595					600					605			

Leu Glu Thr Gln Leu Thr Glu Leu Glu Asp Ala Ala Arg Cys Ile His Ser Gly Thr Asp Glu Thr His Leu Ala Asp Leu Glu Asp Gln Val Ala Thr Ala Ala Ala Gln Val His His Ala Glu Leu Gln Ile Ser Asp Ile Glu Ser Arg Ile Ser Ala Leu Thr Ile Ala Gly Leu Asn Ile Ala Pro Cys Val Arg Phe Thr Arg Arg Arg Asp Gln Lys Gln Arg Thr Gln Val Gln Thr Ile Asp Thr Ser Arg Gln Gln Arg Arg Lys Leu Pro Ala Pro Pro Val Lys Ala Glu Lys Ile Glu Thr Ser Ser Val Thr Thr Ile Lys Thr Phe Asn His Asn Phe Ile Leu Gln Gly Ser Ser Thr Asn Arg Thr Lys Glu Arg Lys Gly Thr Thr Lys Asp Leu Met Glu Pro Ala Leu Glu Ser Ala Val Met Tyr

<210> 3212

<211> 714

<212> PRT

<213> Homo sapiens

<400> 3212

Met Leu His Leu Lys Val Gln Phe Leu Asp Asp Ser Gln Lys Ile Phe

1				5					10					15	
Val	Val	Asp	Gln	Lys	Ser	Ser	Gly	Lys	Ala	Leu	Phe	Asn	Leu	Ser	Cys
			20					25					30		
Ser	His	Leu	Asn	Leu	Ala	Glu	Lys	Glu	Tyr	Phe	Gly	Leu	Glu	Phe	Cys
		35					40					45			
Ser	His	Ser	Gly	Asn	Asn	Val	Trp	Leu	Glu	Leu	Leu	Lys	Pro	Ile	Thr
	50					55					60				
Lys	Gln	Val	Lys	Asn	Pro	Lys	Glu	Ile	Val	Phe	Lys	Phe	Met	Val	Lys
65					70					75					80
Phe	Phe	Pro	Val	Asp	Pro	Gly	His	Leu	Arg	Glu	Glu	Leu	Thr	Arg	Tyr
				85					90					95	
Leu	Phe	Thr	Leu	Gln	Ile	Lys	Lys	Asp	Leu	Ala	Leu	Gly	Arg	Leu	Pro
			100					105					110		
Cys	Ser	Asp	Asn	Cys	Thr	Ala	Leu	Met	Val	Ser	His	Ile	Leu	Gln	Ser
		115					120					125			
Glu	Leu	Gly	Asp	Phe	His	Glu	Glu	Thr	Asp	Arg	Lys	His	Leu	Ala	Gln
	130					135					140				
Thr	Arg	Tyr	Leu	Pro	Asn	Gln	Asp	Cys	Leu	Glu	Gly	Lys	Ile	Met	His
145					150					155					160
Phe	His	Gln	Lys	His	Ile	Gly	Arg	Ser	Pro	Ala	Glu	Ser	Asp	Ile	Leu
				165					170					175	
Leu	Leu	Asp	Ile	Ala	Arg	Lys	Leu	Asp	Met	Tyr	Gly	Ile	Arg	Pro	His
			180					185					190		
Pro	Ala	Ser	Asp	Gly	Glu	Gly	Met	Gln	Ile	His	Leu	Ala	Val	Ala	His
		195					200					205			
Met	Gly	Val	Leu	Val	Leu	Arg	Gly	Asn	Thr	Lys	Ile	Asn	Thr	Phe	Asn
	210					215					220				
Trp	Ala	Lys	Ile	Arg	Lys	Leu	Ser	Phe	Lys	Arg	Lys	His	Phe	Leu	Ile
225					230					235					240

Lys	Leu	His	Ala	Asn	Ile	Leu	Val	Leu	Cys	Lys	Asp	Thr	Leu	Glu	Phe
				245					250					255	
Thr	Met	Ala	Ser	Arg	Asp	Ala	Cys	Lys	Ala	Phe	Trp	Lys	Thr	Cys	Val
			260					265					270		
Glu	Tyr	His	Ala	Phe	Phe	Arg	Leu	Ser	Glu	Glu	Pro	Lys	Ser	Lys	Pro
		275					280					285			
Lys	Thr	Leu	Leu	Cys	Ser	Lys	Gly	Ser	Ser	Phe	Arg	Tyr	Ser	Gly	Arg
	290					295					300				
Thr	Gln	Arg	Gln	Leu	Leu	Glu	Tyr	Gly	Arg	Lys	Gly	Arg	Leu	Lys	Ser
305					310					315					320
Leu	Pro	Phe	Glu	Arg	Lys	His	Tyr	Pro	Ser	Gln	Tyr	His	Glu	Arg	Gln
				325					330					335	
Cys	Arg	Ser	Ser	Pro	Asp	Leu	Leu	Ser	Asp	Val	Ser	Lys	Gln	Val	Glu
			340					345					350		
Asp	Leu	Arg	Leu	Ala	Tyr	Gly	Gly	Gly	Tyr	Tyr	Gln	Asn	Val	Asn	Gly
		355					360					365			
Val	His	Ala	Ser	Glu	Pro	Val	Leu	Glu	Ser	Arg	Arg	Arg	Asn	Ser	Ala
	370					375					380				
Leu	Glu	Val	Thr	Phe	Ala	Thr	Glu	Leu	Glu	His	Ser	Lys	Pro	Glu	Ala
385					390					395					400
Asp	Pro	Thr	Leu	Leu	His	Gln	Ser	Gln	Ser	Ser	Ser	Ser	Phe	Pro	Phe
				405					410					415	
Ile	Tyr	Met	Asp	Pro	Val	Phe	Asn	Thr	Glu	Pro	Asn	Pro	Asn	Pro	Asp
			420					425					430		
Pro	Arg	Asp	Ile	Phe	Ser	Glu	Arg	Ser	Ser	Leu	Ser	Ser	Phe	Gln	Thr
		435					440					445			
Ser	Cys	Lys	Phe	Ser	Gly	Asn	His	Met	Ser	Ile	Tyr	Ser	Gly	Leu	Thr
	450					455					460				
Sar	Ive	Val	Δrσ	Pro	Δla	Lvc	Gln	I Au	Thr	Tur	Thr	Acn	Val	Dro	Туг

465					470					475					480
Ile	Pro	Cys	Thr	Gly	Gln	Gln	Val	Gly	Ile	Met	Pro	Pro	Gln	Val	Phe
				485					490					495	
Phe	Tyr	Val	Asp	Lys	Pro	Pro	Gln	Val	Pro	Arg	Trp	Ser	Pro	Ile	Arg
			500					505					510		
Ala	Glu	Glu	Arg	Thr	Ser	Pro	His	Ser	Tyr	Val	Glu	Pro	Thr	Ala	Met
		515					520					525			
Lys	Pro	Ala	Glu	Arg	Ser	Pro	Arg	Asn	Ile	Arg	Met	Lys	Ser	Phe	Gln
	530					535					540				
Gln	Asp	Leu	Gln	Val	Leu	Gln	Glu	Ala	Ile	Ala	Arg	Thr	Ser	Gly	Arg
545					550					555					560
Ser	Asn	Ile	Asn	Val	Gly	Leu	Glu	Glu	Glu	Asp	Pro	Asn	Leu	Glu	Asp
				565					570					575	
Ala	Phe	Val	Cys	Asn	Ile	Gln	Glu	Gln	Thr	Pro	Lys	Arg	Ser	Gln	Ser
			580					585					590		
Gln	Ser	Asp	Met	Lys	Thr	Ile	Arg	Phe	Pro	Phe	Gly	Ser	Glu	Phe	Arg
		595					600					605			
Pro	Leu	Gly	Pro	Cys	Pro	Ala	Leu	Ser	His	Lys	Ala	Asp	Leu	Phe	Thr
	610					615					620				
Asp	Met	Phe	Ala	Glu	Gln	Glu	Leu	Pro	Ala	Val	Leu	Met	Asp	Gln	Ser
625					630					635					640
Thr	Ala	Glu	Arg	Tyr	Val	Ala	Ser	Glu	Ser	Ser	Asp	Ser	Glu	Ser	Glu
				645					650					655	
Ile	Leu	Lys	Pro	Asp	Tyr	Tyr	Ala	Leu	Tyr	Gly	Lys	Glu	Ile	Arg	Ser
			660					665					670		
Pro	Met	Ala	Arg	Ile	Arg	Leu	Ser	Ser	Gly	Ser	Leu	Gln	Leu	Asp	Glu
		675					680					685			
Glu	Asp	Glu	Asp	Ala	Tyr	Phe	Asn	Thr	Pro	Thr	Ala	Glu	Asp	Arg	Thr
	690					695					700				

Ser Leu Lys Pro Cys Asn Tyr Phe Leu Ala 705 710

<210> 3213

<211> 393

<212> PRT

<213> Homo sapiens

<400> 3213

Met Glu Gln Cys Ala Cys Val Glu Arg Glu Leu Asp Lys Val Leu Gln

1 5 10 15

Lys Phe Leu Thr Tyr Gly Gln His Cys Glu Arg Ser Leu Glu Glu Leu
20 25 30

Leu His Tyr Val Gly Gln Leu Arg Ala Glu Leu Ala Ser Ala Ala Leu

35 40 45

Gln Gly Thr Pro Leu Ser Ala Thr Leu Ser Leu Val Met Ser Gln Cys
50 55 60

Cys Arg Lys Ile Lys Asp Thr Val Gln Lys Leu Ala Ser Asp His Lys
65 70 75 80

Asp Ile His Ser Ser Val Ser Arg Val Gly Lys Ala Ile Asp Arg Asn 85 90 95

Phe Asp Ser Glu Ile Cys Gly Val Val Ser Asp Ala Val Trp Asp Ala
100 105 110

Arg Glu Gln Gln Gln Ile Leu Gln Met Ala Ile Val Glu His Leu
115 120 125

Tyr Gln Gln Gly Met Leu Ser Val Ala Glu Glu Leu Cys Gln Glu Ser 130 135 140

Thr Leu Asn Val Asp Leu Asp Phe Lys Gln Pro Phe Leu Glu Leu Asn

145					150					155					160
Arg	Ile	Leu	Glu	Ala	Leu	His	Glu	Gln	Asp	Leu	Gly	Pro	Ala	Leu	Glu
				165					170					175	
Trp	Ala	Val	Ser	His	Arg	Gln	Arg	Leu	Leu	Glu	Leu	Asn	Ser	Ser	Leu
			180					185					190		
Glu	Phe	Lys	Leu	His	Arg	Leu	His	Phe	Ile	Arg	Leu	Leu	Ala	Gly	Gly
		195					200					205			
Pro	Ala	Lys	Gln	Leu	Glu	Ala	Leu	Ser	Tyr	Ala	Arg	His	Phe	Gln	Pro
	210					215					220				
Phe	Ala	Arg	Leu	His	Gln	Arg	Glu	Ile	Gln	Val	Met	Met	Gly	Ser	Leu
225					230					235					240
Val	Tyr	Leu	Arg	Leu	Gly	Leu	Glu	Lys	Ser	Pro	Tyr	Cys	His	Leu	Leu
				245					250					255	
Asp	Ser	Ser	His	Trp	Ala	Glu	Ile	Cys	Glu	Thr	Phe	Thr	Arg	Asp	Ala
			260					265					270		
Cys	Ser	Leu	Leu	Gly	Leu	Ser	Val	Glu	Ser	Pro	Leu	Ser	Val	Ser	Phe
	•	275					280					285			
Ala	Ser	Gly	Cys	Val	Ala	Leu	Pro	Val	Leu	Met	Asn	Ile	Lys	Ala	Val
	290					295					300				
Ile	Glu	Gln	Arg	Gln	Cys	Thr	Gly	Val	Trp	Asn	His	Lys	Asp	Glu	Leu
305					310					315					320
Pro	Ile	Glu	Ile	Glu	Leu	Gly	Met	Lys	Cys	Trp	Tyr	His	Ser	Val	Phe
				325					330					335	
Ala	Cys	Pro	Ile	Leu	Arg	Gln	Gln	Thr	Ser	Asp	Ser	Asn	Pro	Pro	Ile
			340					345					350		
Lys	Leu	Ile	Cys	Gly	His	Val	Ile	Ser	Arg	Asp	Ala	Leu	Asn	Lys	Leu
		355			-		360					365			
Ile	Asn	Gly	Gly	Lys	Leu	Lys	Cys	Pro	Tyr	Cys	Pro	Met	Glu	Gln	Asn
	370					375					380				

Pro Ala Asp Gly Lys Arg Ile Ile Phe

<210> 3214

<211> 161

<212> PRT

<213> Homo sapiens

<400> 3214

Met Thr Gly Phe Lys Ala Ser Lys Asn Arg Val Thr Leu Leu Ser Asp

Thr Asn Thr Ala Ala Asp Leu Lys Leu Lys Pro Val Leu Thr Ala His

Ser Glu Asn Leu Arg Ile Leu Lys Asn Cys Ala Lys Ser Thr Val Pro

Met Cys Asn Lys Ala Leu Met Ala Ala Cys Leu Phe Thr Ile Ser Phe

Thr Glu Tyr Leu Lys Pro Thr Thr Glu Asn Tyr Cys Ser Gly Lys Lys

Ile Leu Phe Lys Ile Val Leu Leu Phe Asp Asn Gly Pro Gly His Pro

Arg Ala Leu Met Glu Val Cys Lys Glu Met Asn Ala Val Phe Met Pro

Ala Asn Thr Thr Pro Val Leu Tyr Ser Met Asp His Arg Val Ile Leu

Thr Phe Lys Ser Tyr Tyr Leu Arg Asn Lys Phe Cys Lys Ala Ile Ala

Ala Thr His Ser Tyr Ser Cys Asp Gly Ser Gly Gln Ser Lys Leu Lys

145 150 155 160

Thr

<210> 3215

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3215

Met Asn Thr Ile Val Phe Asn Lys Leu Ser Gly Ala Val Leu Phe Glu

1 5 10 15

Asp Gly Gly Ala Ser Glu Arg Glu Arg Gly Gly Arg Pro Tyr Ser Gly

20 25 30

Val Leu Asp Ser Pro His Ala Arg Pro Glu Val Gly Ile Pro Asp Gly

35 40 45

Pro Pro Leu Lys Asp Asn Leu Gly Leu Arg His Arg Arg Thr Gly Ala

50 55 60

Arg Gln Asn Gly Gly Lys Val Arg His Lys Arg Gln Ala Leu Gln Asp

65 70 75 80

Met Ala Arg Pro Leu Lys Gln Trp Leu Tyr Lys His Arg Asp Asn Pro

85 90 95

Tyr Pro Thr Lys Thr Glu Lys Ile Leu Leu Ala Leu Gly Ser Gln Met

100 105 110

Thr Leu Val Gln Val Ser Asn Trp Phe Ala Asn Ala Arg Arg Arg Leu

115 120 125

Lys Asn Thr Val Arg Gln Pro Asp Leu Ser Trp Ala Leu Arg Ile Lys

130 135 140

Leu	Tyr	Asn	Lys	Tyr	Val	Gln	Gly	Asn	Ala	Glu	Arg	Leu	Ser	Val	Ser
145					150					155					160
Ser	Asp	Asp	Ser	Cys	Ser	Glu	Asp	Gly	Glu	Asn	Pro	Pro	Arg	Thr	His
				165					170					175	
Met	Asn	Glu	Gly	Gly	Tyr	Asn	Thr	Pro	Val	His	His	Pro	Val	Ile	Lys
			180					185					190		
Ser	Glu	Asn	Ser	Val	Ile	Lys	Ala	Gly	Val	Arg	Pro	Glu	Ser	Arg	Ala
		195					200					205			
Ser	Glu	Asp	Tyr	Val	Ala	Pro	Pro	Lys	Tyr	Lys	Ser	Ser	Leu	Leu	Asn
	210					215					220				
Arg	Tyr	Leu	Asn	Asp	Ser	Leu	Arg	His	Val	Met	Ala	Thr	Asn	Thr	Thr
225					230					235					240
Met	Met	Gly	Lys	Thr	Arg	Gln	Arg	Asn	His	Ser	Gly	Ser	Phe	Ser	Ser
				245					250					255	
Asn	Glu	Phe	Glu	Glu	Glu	Leu	Val	Ser	Pro	Ser	Ser	Ser	Glu	Thr	Glu
			260					265					270		
Gly	Asn	Phe	Val	Tyr	Arg	Thr	Asp	Thr	Leu	Glu	Asn	Gly	Ser	Asn	Lys
		275													
Gly							280					285			
	Glu		Ala	Ala	Asn	Arg		Gly	Pro	Ser	Lys		Asp	Thr	Tyr
	Glu 290		Ala	Ala	Asn	Arg 295		Gly	Pro	Ser	Lys 300		Asp	Thr	Tyr
Trp	290	Ser				295	Lys			Ser Thr	300	Asp			
Trp 305	290	Ser				295	Lys				300	Asp			
305	290 Lys	Ser	Ile	Asn	Ala 310	295 Ala	Lys Met	Ala	Leu	Thr	300 Asn	Asp Leu	Ala	Gln	Gly 320
305	290 Lys	Ser	Ile	Asn	Ala 310	295 Ala	Lys Met	Ala	Leu	Thr 315	300 Asn	Asp Leu	Ala	Gln	Gly 320
305 Lys	290 Lys Asp	Ser Glu Lys	Ile Leu	Asn Gln 325	Ala 310 Gly	295 Ala Thr	Lys Met Thr	Ala	Leu Cys 330	Thr 315	300 Asn Ile	Asp Leu Gln	Ala Lys	Gln Ser 335	Gly 320 Ser

<210> 3216

<211> 1284

<212> PRT

<213> Homo sapiens

<400> 3216

Met His Val Phe Ile Val Gly Met Ser Leu Ser Ser Val Thr Leu Ala 1 5 10 15

Ser Ala Leu Gln Val Arg Gly Glu Ala Leu Ser Glu Glu Glu Ile Trp
20 25 30

Ser Leu Leu Phe Leu Ala Ala Glu Gln Leu Leu Glu Asp Leu Arg Asn 35 40 45

Asp Ser Ser Asp Tyr Val Val Cys Pro Trp Ser Ala Leu Leu Ser Ala
50 55 60

Ala Gly Ser Leu Ser Phe Gln Gly Arg Val Ser His Ile Glu Ala Ala 65 70 75 80

Pro Phe Lys Ala Pro Glu Leu Leu Gln Gly Gln Ser Glu Asp Glu Gln
85 90 95

Pro Asp Ala Ser Gln Pro Leu Gln Leu Cys Glu Pro Leu His Ser Ile 100 105 110

Leu Leu Thr Met Cys Glu Asp Gln Pro His Arg Arg Cys Thr Leu Gln
115 120 125

Ser Val Leu Glu Ala Cys Arg Val His Glu Lys Glu Val Ser Val Tyr 130 135 140

Pro Ala Pro Ala Gly Leu His Ile Arg Arg Leu Val Gly Leu Val Leu 145 150 155 160

Gly Thr Ile Ser Glu Val Glu Lys Arg Val Val Glu Glu Ser Ser Ser 165 170 175

Val Gln Gln Asn Arg Ser Tyr Leu Leu Arg Lys Arg Leu Arg Gly Thr
180 185 190

Ser	Ser	Glu	Ser	Pro	Ala	Ala	Gln	Ala	Pro	Glu	Cys	Leu	His	Pro	Cys
		195					200					205			
Arg	Val	Ser	Glu	Arg	Ser	Thr	Glu	Thr	Gln	Ser	Ser	Pro	Glu	Pro	His
	210					215					220				
Trp	Ser	Thr	Leu	Thr	His	Ser	His	Cys	Ser	Leu	Leu	Val	Asn	Arg	Ala
225					230					235					240
Leu	Pro	Gly	Ala	Asp	Pro	Gln	Asp	Gln	Gln	Ala	Gly	Arg	Arg	Leu	Ser
				245					250					255	
Ser	Gly	Ser	Val	His	Ser	Ala	Ala	Asp	Ser	Ser	Trp	Pro	Thr	Thr	Pro
			260					265					270		
Ser	Gln	Arg	Gly	Phe	Leu	Gln	Arg	Arg	Ser	Lys	Phe	Ser	Arg	Pro	Glu
		275					280					285			
Phe	Ile	Leu	Leu	Ala	Gly	Glu	Ala	Pro	Met	Thr	Leu	His	Leu	Pro	Gly
	290					295					300				
Ser	Val	Val	Thr	Lys	Lys	Gly	Lys	Ser	Tyr	Leu	Ala	Leu	Arg	Asp	Leu
305					310					315					320
Cys	Val	Val	Leu	Leu	Asn	Gly	Gln	His	Leu	Glu	Val	Lys	Cys	Asp	Val
				325					330					335	
Glu	Ser	Thr	Val	Gly	Ala	Val	Phe	Asn	Ala	Val	Thr	Ser	Phe	Ala	Asn
			340					345					350		
Leu	Glu	Glu	Leu	Thr	Tyr	Phe	Gly	Leu	Ala	Tyr	Met	Lys	Ser	Lys	Glu
		355					360					365			
Phe	Phe	Phe	Leu	Asp	Ser	Glu	Thr	Arg	Leu	Cys	Lys	Ile	Ala	Pro	Glu
	370					375					380				
Gly	Trp	Arg	Glu	Gln	Pro	Gln	Lys	Thr	Ser	Met	Asn	Thr	Phe	Thr	Leu
385					390					395					400
Phe	Leu	Arg	Ile	Lys	Phe	Phe	Val	Ser	His	Tyr	Gly	Leu	Leu	Gln	His
				405					410					415	
Ser	Leu	Thr	Arg	His	Gln	Phe	Tyr	Leu	Gln	Leu	Arg	Lys	Asp	Ile	Leu

			420					425					430		
Glu	Glu	Arg	Leu	Tyr	Cys	Asn	Glu	Glu	Ile	Leu	Leu	Gln	Leu	Gly	Val
		435					440					445			
Leu	Ala	Leu	Gln	Ala	Glu	Phe	Gly	Asn	Tyr	Pro	Lys	Glu	Val	Glu	Ser
	450					455					460				
Lys	Pro	Tyr	Phe	His	Val	Glu	Asp	Tyr	Ile	Pro	Ala	Ser	Leu	Ile	Glu
465					470					475					480
Arg	Met	Thr	Ala	Leu	Arg	Val	Gln	Val	Glu	Val	Ser	Glu	Met	His	Arg
				485					490					495	
Leu	Ser	Ser	Ala	Leu	Trp	Gly	Glu	Asp	Ala	Glu	Leu	Glu	Phe	Leu	Arg
			500					505					510		
Val	Thr	Gln	Gln	Leu	Pro	Glu	Tyr	Gly	Val	Leu	Val	His	Gln	Val	Phe
		515			÷		520					525			
Ser	Glu	Lys	Arg	Arg	Pro	Glu	Glu	Glu	Met	Ala	Leu	Gly	Ile	Cys	Ala
	530					535					540				
Lys	Gly	Val	Ile	Val	Tyr.	Glu	Val	Lys	Asn	Asn	Ser	Arg	Ile	Ala	Met
545					550					555					560
Leu	Arg	Phe	Gln	Trp	Arg	Glu	Thr	Gly	Lys	Ile	Ser	Thr	Tyr	Gln	Lys
				565					570					575	
Lys	Phe	Thr	Ile	Thr	Ser	Ser	Val	Thr	Gly	Lys	Lys	His	Thr	Phe	Val
			580					585					590		
Thr	Asp	Ser	Ala	Lys	Thr	Ser	Lys	Tyr	Leu	Leu	Asp	Leu	Cys	Ser	Ala
		595					600					605			
Gln	His	Gly	Phe	Asn	Ala	Gln	Met	Gly	Ser	Gly	Gln	Pro	Ser	His	Val
	610					615					620				
Leu	Phe	Asp	His	Asp	Lys	Phe	Val	Gln	Met	Ala	Asn	Leu	Ser	Pro	Ala
625					630					635					640
His	Gln	Ala	Arg	Ser	Lys	Pro	Leu	Ile	Trp	Ile	Gln	Arg	Leu	Ser	Cys
				645					650					655	

Ser	Glu	Asn	Glu	Leu	Phe	Val	Ser	Arg	Leu	Gln	Gly	Ala	Ala	Gly	Gly
			660					665					670		
Leu	Leu	Ser	Thr	Ser	Met	Asp	Asn	Phe	Asn	Val	Asp	Gly	Ser	Lys	Glu
		675					680					685			
Ala	Gly	Ala	Glu	Gly	Ile	Gly	Arg	Ser	Pro	Cys	Thr	Gly	Arg	Glu	Gln
	690					695					700				
Leu	Lys	Ser	Ala	Cys	Val	Ile	Gln	Lys	Pro	Met	Thr	Trp	Asp	Ser	Leu
705					710					715					720
Ser	Gly	Pro	Pro	Val	Gln	Ser	Met	His	Ala	Gly	Ser	Lys	Asn	Asn	Arg
				725					730					735	
Arg	Lys	Ser	Phe	Ile	Ala	Glu	Pro	Gly	Arg	Glu	Ile	Val	Arg	Val	Thr
			740					745					750		
Leu	Lys	Arg	Asp	Pro	His	Arg	Gly	Phe	Gly	Phe	Val	Ile	Asn	Glu	Gly
		755					760					765			
Glu	Tyr	Ser	Gly	Gln	Ala	Asp	Pro	Gly	Ile	Phe	Ile	Ser	Ser	Ile	Ile
	770					775					780				
Pro	Gly	Gly	Pro	Ala	Glu	Lys	Ala	Lys	Thr	Ile	Lys	Pro	Gly	Gly	Gln
785					790					795					800
Ile	Leu	Ala	Leu	Asn	His	Ile	Ser	Leu	Glu	Gly	Phe	Thr	Phe	Asn	Met
				805					810					815	
Ala	Val	Arg	Met	Ile	Gln	Asn	Ser	Pro	Asp	Asn	Ile	Glu	Leu	Ile	Ile
			820					825					830		
Ser	Gln	Ser	Lys	Gly	Val	Gly	Gly	Asn	Asn	Pro	Asp	Glu	Glu	Lys	Asn
		835					840					845			
Gly	Thr	Ala	Asn	Ser	Gly	Val	Ser	Ser	Thr	Asp	Ile	Leu	Ser	Phe	Gly
	850					855					860				
Tyr	Gln	Gly	Ser	Leu	Ser	Ser	His	Thr	Gln	Asp	Gln	Asp	Arg	Asn	Thr
865					870					875					880
Glu	Glu	Leu	Asp	Met	Ala	Gly	Val	Gln	Ser	Leu	Val	Pro	Arg	Leu	Arg

			885					890					895	
His Gl	n Leu	Ser	Phe	Leu	Pro	Leu	Lys	Gly	Ala	Gly	Ser	Ser	Cys	Pro
		900					905					910		
Pro Se	r Pro	Pro	Glu	Ile	Ser	Ala	Gly	Glu	Ile	Tyr	Phe	Val	Glu	Leu
	915					920					925			
Val Ly	s Glu	Asp	Gly	Thr	Leu	Gly	Phe	Ser	Val	Thr	Gly	Gly	Ile	Asn
93	0				935					940				
Thr Se	r Val	Pro	Tyr	Gly	Gly	Ile	Tyr	Val	Lys	Ser	Ile	Val	Pro	Gly
945				950					955					960
Gly Pr	o Ala	Ala	Lys	Glu	Gly	Gln	Ile	Leu	Gln	Gly	Asp	Arg	Leu	Leu
			965					970					975	
Gln Va	l Asp	Gly	Val	Ile	Leu	Cys	Gly	Leu	Thr	His	Lys	Gln	Ala	Val
		980					985					990		
Gln Cy	s Leu	Lys	Gly	Pro	Gly	Gln	Val	Ala	Arg	Leu	Val	Leu	Glu	Arg
	995					1000					1005			
Arg Va	l Pro	Arg	Ser	Thr	Gln	Gln	Cys	Pro	Ser	Ala	Asn	Asp	Ser	Met
101	0				1015					1020				
Gly As	p Glu	Arg	Thr	Ala	Val	Ser	Leu	Val	Thr	Ala	Leu	Pro	Gly	Arg
1025				1030					1035					1040
Pro Se	r Ser	Cys	Val	Ser	Val	Thr	Asp	Gly	Pro	Lys	Phe	Glu	Val	Lys
			1045					1050					1055	
Leu Ly	s Lys	Asn	Ala	Asn	Gly	Leu	Gly	Phe	Ser	Phe	Val	Gln	Met	Glu
		1060					1065					1070		
Lys Gl	u Ser	Cys	Ser	His	Leu	Lys	Ser	Asp	Leu	Val	Arg	Ile	Lys	Arg
	1075					1080					1085			
Leu Ph	e Pro	Gly	Gln	Pro	Ala	Glu	Glu	Asn	Gly	Ala	Ile	Ala	Ala	Gly
109	0				1095					1100				
Asp II	e Ile	Leu	Ala	Val	Asn	Gly	Arg	Ser	Thr	Glu	Gly	Leu	Ile	Phe
1105				1110					1115					1120

Gln	Glu	Val	Leu	His	Leu	Leu	Arg	Gly	Ala	Pro	Gln	Glu	Val	Thr	Leu
]	125]	130]	1135	

Leu Leu Cys Arg Pro Pro Pro Gly Ala Leu Pro Glu Met Glu Gln Glu
1140 1145 1150

Trp Gln Thr Pro Glu Leu Ser Ala Asp Lys Glu Phe Thr Arg Ala Thr
1155 1160 1165

Cys Thr Asp Ser Cys Thr Ser Pro Ile Leu Asp Gln Glu Asp Ser Trp 1170 1175 1180

Arg Asp Ser Ala Ser Pro Asp Ala Gly Glu Gly Leu Gly Leu Arg Pro 1185 1190 1195 1200

Glu Ser Ser Gln Lys Ala Ile Arg Glu Ala Gln Trp Gly Gln Asn Arg 1205 1210 1215

Glu Arg Pro Trp Ala Ser Ser Leu Thr His Ser Pro Glu Ser His Pro 1220 1225 1230

His Leu Cys Lys Leu His Gln Glu Arg Asp Glu Ser Thr Leu Ala Thr 1235 1240 1245

Ser Leu Glu Lys Asp Val Arg Gln Asn Cys Tyr Ser Val Cys Asp IIe 1250 1255 1260

Met Arg Leu Gly Arg Tyr Ser Phe Ser Ser Pro Leu Thr Arg Leu Ser 1265 1270 1275 1280

Thr Asp Ile Phe

<210> 3217

<211> 971

<212> PRT

<213> Homo sapiens

<400> 3217

Met Gly Val Ala Gly Arg Asn Arg Pro Gly Ala Ala Trp Ala Val Leu

1 5 10 15

Leu Leu Leu Leu Leu Leu Pro Pro Leu Leu Leu Ala Gly Ala Val 20 25 30

Pro Pro Gly Arg Gly Arg Ala Ala Gly Pro Gln Glu Asp Val Asp Glu
35 40 45

Cys Ala Gln Gly Leu Asp Asp Cys His Ala Asp Ala Leu Cys Gln Asn 50 55 60

Thr Pro Thr Ser Tyr Lys Cys Ser Cys Lys Pro Gly Tyr Gln Gly Glu 65 70 75 80

Gly Arg Gln Cys Glu Asp Ile Asp Glu Cys Gly Asn Glu Leu Asn Gly 85 90 95

Gly Cys Val His Asp Cys Leu Asn Ile Pro Gly Asn Tyr Arg Cys Thr
100 105 110

Cys Phe Asp Gly Phe Met Leu Ala His Asp Gly His Asn Cys Leu Asp 115 120 125

Val Asp Glu Cys Leu Glu Asn Asn Gly Gly Cys Gln His Thr Cys Val 130 135 140

Asn Val Met Gly Ser Tyr Glu Cys Cys Cys Lys Glu Gly Phe Phe Leu 145 150 155 160

Ser Asp Asn Gln His Thr Cys Ile His Arg Ser Glu Glu Gly Leu Ser 165 170 175

Cys Met Asn Lys Asp His Gly Cys Ser His Ile Cys Lys Glu Ala Pro 180 185 190

Arg Gly Ser Val Ala Cys Glu Cys Arg Pro Gly Phe Glu Leu Ala Lys 195 200 205

Asn Gln Arg Asp Cys Ile Leu Thr Cys Asn His Gly Asn Gly Gly Cys
210 215 220

Gln	His	Ser	Cys	Asp	Asp	Thr	Ala	Asp	Gly	Pro	Glu	Cys	Ser	Cys	His
225					230					235					240
Pro	Gln	Tyr	Lys	Met	His	Thr	Asp	Gly	Arg	Ser	Cys	Leu	Glu	Arg	Glu
				245					250					255	
Asp	Thr	Val	Leu	Glu	Val	Thr	Glu	Ser	Asn	Thr	Thr	Ser	Val	Val	Asp
			260					265					270		
Gly	Asp	Lys	Arg	Val	Lys	Arg	Arg	Leu	Leu	Met	Glu	Thr	Cys	Ala	Val
		275					280					285			
Asn	Asn	Gly	Gly	Cys	Asp	Arg	Thr	Cys	Lys	Asp	Thr	Ser	Thr	Gly	Val
	290					295					300				
His	Cys	Ser	Cys	Pro	Val	Gly	Phe	Thr	Leu	Gln	Leu.	Asp	Gly	Lys	Thr
305					310					315					320
Cys	Lys	Asp	Ile	Asp	Glu	Cys	Gln	Thr	Arg	Asn	Gly	Gly	Cys	Asp	His
				325					330					335	
Phe	Cys	Lys	Asn	Ile	Val	Gly	Ser	Phe	Asp	Cys	Gly	Cys	Lys	Lys	Gly
			340					345					350		
Phe	Lys	Leu	Leu	Thr	Asp	Glu	Lys	Ser	Cys	Gln	Asp	Val	Asp	Glu	Cys
		355					360					365			
Ser	Leu	Asp	Arg	Thr	Cys	Asp	His	Ser	Cys	Ile	Asn	His	Pro	Gly	Thr
	370					375					380				
Phe	Ala	Cys	Ala	Cys	Asn	Arg	Gly	Tyr	Thr	Leu	Tyr	Gly	Phe	Thr	His
385	•				390					395					400
Cys	Gly	Asp	Thr	Asn	Glu	Cys	Ser	Ile	Asn	Asn	Gly	Gly	Cys	Gln	Gln
				405					410					415	
Val	Cys	Val	Asn	Thr	Val	Gly	Ser	Tyr	Glu	Cys	Gln	Cys	His	Pro	Gly
			420					425					430		
Tyr	Lys	Leu	His	Trp	Asn	Lys	Lys	Asp	Cys	Val	Glu	Val	Lys	Gly	Leu
		435					440					445			
Leu	Pro	Thr	Ser	Val	Ser	Pro	Arg	Val	Ser	Leu	His	Cys	Glv	Lvs	Ser

	450					455					460				
Gly	Gly	Gly	Asp	Gly	Cys	Phe	Leu	Arg	Cys	His	Ser	Gly	Ile	His	Leu
465					470					475					480
Ser	Ser	Gly	Leu	Gln	Gly	Ala	Tyr	Ser	Val	Thr	Cys	Gly	Ser	Ser	Ser
				485					490					495	
Pro	Leu	Arg	Asn	Lys	Gln	Gln	Lys	Ser	Asn	Asp	Ser	Ala	Phe	Gly	Asp
			500					505					510		
Val	Thr	Thr	Ile	Arg	Thr	Ser	Val	Thr	Phe	Lys	Leu	Asn	Glu	Gly	Lys
		515					520					525			
Cys	Ser	Leu	Lys	Asn	Ala	Glu	Leu	Phe	Pro	Glu	Gly	Leu	Arg	Pro	Ala
	530					535					540				
Leu	Pro	Glu	Lys	His	Ser	Ser	Val	Lys	Glu	Ser	Phe	Arg	Tyr	Val	Asn
545					550					555					560
Leu	Thr	Cys	Ser	Ser	Gly	Lys	Gln	Val	Pro	Gly	Ala	Pro	Gly	Arg	Pro
				565					570					575	
Ser	Thr	Pro	Lys	Glu	Met	Phe	Ile	Thr	Val	Glu	Phe	Glu	Leu	Glu	Thr
			580					585					590		
Asn	Gln	Lys	Glu	Val	Thr	Ala	Ser	Cys	Asp	Leu	Ser	Cys	Ile	Val	Lys
		595					600					605			
Arg	Thr	Glu	Lys	Arg	Leu	Arg	Lys	Ala	Ile	Arg	Met	Leu	Arg	Lys	Ala
	610					615					620				
Val	His	Arg	Glu	Gln	Phe	His	Leu	Gln	Leu	Ser	Gly	Met	Asn	Leu	Asp
625					630					635					640
Val	Ala	Lys	Lys	Pro	Pro	Arg	Thr	Ser	Glu	Arg	Gln	Ala	Glu	Ser	Cys
				645					650					655	
Gly	Val	Gly	Gln	Gly	His	Ala	Glu	Asn	Gln	Cys	Gly	Leu	Cys	Gln	Pro
			660					665					670		
Gly	Glu	Tyr	Ser	Ala	Asp	Gly	Phe	Ala	Pro	Cys	Gln	Leu	Cys	Ala	Leu
		675					680					685			

Gly	Thr	Phe	Gln	Pro	Glu	Ala	Gly	Arg	Thr	Ser	Cys	Phe	Pro	Cys	Gly
	690					695					700				
Gly	Gly	Leu	Ala	Thr	Lys	His	Gln	Gly	Ala	Thr	Ser	Phe	Gln	Asp	Cys
705					710			•		715					720
Glu	Thr	Arg	Val	Gln	Cys	Ser	Pro	Gly	His	Phe	Tyr	Asn	Thr	Thr	Thr
				725					730					735	
His	Arg	Cys	Ile	Arg	Cys	Pro	Val	Gly	Thr	Tyr	Gln	Pro	Glu	Phe	Gly
			740					745					750		
Lys	Asn	Asn	Cys	Val	Ser	Cys	Pro	Gly	Asn	Thr	Thr	Thr	Asp	Phe	Asp
		755					760					765			
Gly	Ser	Thr	Asn	Ile	Thr	Gln	Cys	Lys	Asn	Arg	Arg	.Cys	Gly	Gly	Glu
	770					775					780				
Leu	Gly	Asp	Phe	Thr	Gly	Tyr	Ile	Glu	Ser	Pro	Asn	Tyr	Pro	Gly	Asr
785					790					795					800
Tyr	Pro	Ala	Asn	Thr	Glu	Cys	Thr	Trp	Thr	Ile	Asn	Pro	Pro	Pro	Lys
				805					810					815	
Arg	Arg	Ile	Leu	Ile	Val	Val	Pro	Glu	Ile	Phe	Leu	Pro	Ile	Glu	Asp
			820					825					830		
Asp	Cys	Gly	Asp	Tyr	Leu	Val	Met	Arg	Lys	Thr	Ser	Ser	Ser	Asn	Ser
		835					840					845			
Val	Thr	Thr	Tyr	Glu	Thr	Cys	Gln	Thr	Tyr	Glu	Arg	Pro	Ile	Ala	Phe
	850					855					860				
Thr	Ser	Arg	Ser	Lys	Lys	Leu	Trp	Ile	Gln	Phe	Lys	Ser	Asn	Glu	Gly
865					870					875					880
Asn	Ser	Ala	Arg	Gly	Phe	Gln	Gly	Pro	Tyr	Val	Thr	Tyr	Asp	Glu	Asp
				885					890					895	
Tyr	Gln	Glu	Leu	Ile	Glu	Asp	Ile	Val	Arg	Asp	Gly	Arg	Leu	Tyr	Ala
			900					905					910		
Ser	Glu	Asn	His	Gln	Glu	Ile	Leu	Lys	Asp	Lys	Lys	Leu	Ile	Lys	Ala

<210> 3218

<211> 426

<212> PRT

<213> Homo sapiens

<400> 3218

Met Leu Gly Ser Phe Ser Gly Thr Thr Val Pro Ala Leu Leu Asn Ser

1 5 10 15

Thr Ser Asn Gln Leu Tyr Leu His Phe Tyr Ser Asp Ile Ser Val Ser

20 25 30

Ala Ala Gly Phe His Leu Glu Tyr Lys Thr Val Gly Leu Ser Ser Cys

35
40
45

Pro Glu Pro Ala Val Pro Ser Asn Gly Val Lys Thr Gly Glu Arg Tyr
50 55 60

Leu Val Asn Asp Val Val Ser Phe Gln Cys Glu Pro Gly Tyr Ala Leu 65 70 75 80

Gln Gly His Ala His Ile Ser Cys Met Pro Gly Thr Val Arg Arg Trp

85 90 95

Asn Tyr Pro Pro Pro Leu Cys Ile Ala Gln Cys Gly Gly Thr Val Glu
100 105 110

Glu	Met	Glu	Gly	Val	Ile	Leu	Ser	Leu	Gly	Phe	Pro	Gly	Asn	Tyr	Pro
		115					120					125			
Ser	Asn	Met	Asp	Cys	Ser	Trp	Lys	Ile	Ala	Leu	Pro	Val	Gly	Phe	Gly
	130					135					140				
Ala	His	Ile	Gln	Phe	Leu	Asn	Phe	Ser	Thr	Glu	Pro	Asn	His	Asp	Tyr
145					150					155					160
Ile	Glu	Ile	Arg	Asn	Gly	Pro	Tyr	Glu	Thr	Ser	Arg	Met	Met	Gly	Arg
				165					170					175	
Phe	Ser	Gly	Ser	Glu	Leu	Pro	Ser	Ser	Leu	Leu	Ser	Thr	Ser	His	Glu
			180					185					190		
Thr	Thr	Val	Tyr	Phe	His	Ser	Asp	His	Ser	Gln	Asn	Arg	Pro	Gly	Phe
		195					200					205			
Lys	Leu	Glu	Tyr	Gln	Ala	Tyr	Glu	Leu	Gln	Glu	Cys	Pro	Asp	Pro	Glu
	210					215					220				
Pro	Phe	Ala	Asn	Gly	Ile	Val	Arg	Gly	Ala	Gly	Tyr	Asn	Val	Gly	Glr
225					230					235					240
Ser	Val	Thr	Phe	Glu	Cys	Leu	Pro	Gly	Tyr	Gln	Leu	Thr	Gly	His	Pro
				245					250					255	
Val	Leu	Thr	Cys	Gln	His	Gly	Thr	Asn	Arg	Asn	Trp	Asp	His	Pro	Leı
			260					265					270		
Pro	Lys	Cys	Glu	Val	Pro	Cys	Gly	Gly	Asn	Ile	Thr	Ser	Ser	Asn	Gly
		275					280					285			
Thr	Val	Tyr	Ser	Pro	Gly	Phe	Pro	Ser	Pro	Tyr		Ser	Ser	Gln	Asp
	290					295					300				
Cys	Val	Trp	Leu	Ile	Thr	Val	Pro	Ile	Gly	His	Gly	Val	Arg	Leu	Asr
305					310					315					320
Leu	Ser	Leu	Leu	Gln	Thr	Glu	Pro	Ser	Gly	Asp	Phe	Ile	Thr	Ile	Trp
				325	•				330					335	
Asp	Glv	Pro	Gln	Gln	Thr	Ala	Pro	Arg	Leu	Glv	Val	Phe	Thr	Arg	Ser

Met Ala Lys Lys Thr Val Gln Ser Ser Ser Asn Gln Val Leu Leu Lys Phe His Arg Asp Ala Ala Thr Gly Gly Ile Phe Ala Ile Ala Phe Ser Asp His Cys Arg Tyr Phe Asn Gln Lys Ser Gly Lys Leu Asp Phe Thr Pro Ser Ser Thr Leu Gly Gln Leu Cys Lys Thr Leu His Arg Ser Leu Pro His Leu Arg Leu Gln Phe Leu His Leu

<210> 3219

<211> 292

<212> PRT

<213> Homo sapiens

<400> 3219

Met Ser Arg Ile Pro Leu Gly Lys Val Leu Leu Arg Asn Val Ile Arg His Thr Asp Ala His Asn Lys Ile Gln Glu Glu Ser Asp Met Trp Lys Ile Arg Glu Leu Glu Lys Gln Met Glu Asp Ala Tyr Arg Gly Thr Lys Arg Lys Met Leu Pro Ser Ser Ser Ser Arg Met Arg Ser Asp Gly Phe Asp Glu Glu Ser Gln Arg Tyr Tyr Trp Arg Pro Lys Asn Glu Ile Ser

Gly	Thr	Leu	Glu	Asp	Asp	Phe	Leu	Lys	Ala	Lys	Ser	Trp	Asn	Lys	·Lys
				85					90					95	
Phe	Tyr	Asp	Tyr	Glu	Ala	Asn	Met	Pro	Asp	Arg	Trp	Gly	His	Ser	Gly
			100					105					110		
Tyr	Lys	Glu	Leu	Tyr	Pro	Glu	Glu	Phe	Glu	Thr	Asn	Ser	Asp	Gln	Gln
		115					120					125			
Asp	Ile	Thr	Asn	Gly	Lys	Lys	Thr	Ser	Pro	Gln	Val	Lys	Ser	Ser	Thr
	130					135					140				
His	Glu	Ser	Arg	Lys	His	Lys	Lys	Ser	Lys	Lys	Ser	His	Lys	Lys	Lys
145					150					155					160
Gln	Lys	Lys	Arg	Ser	His	Lys	Lys	Gln	Lys	Lys	Ser	Lys	Lys	Glu	Ala
				165					170					175	
Thr	Asp	Ile	Thr	Ala	Asp	Ser	Ser	Ser	Glu	Phe	Ser	Glu	Glu	Thr	Gly
			180					185					190		
Ala	Ser	Gly	Thr	Arg	Lys	Gly	Lys	Gln	Pro	His	Lys	Arg	Lys	Lys	Lys
		195					200					205			
Ser	Arg	Lys	Lys	Ser	Leu	Lys	Lys	Pro	Ala	Leu	Phe	Leu	Glu	Ala	Glu
	210					215					220				
Ser	Asn	Thr	Ser	His	Ser	Asp	Asp	Ser	Ala	Ser	Ser	Ser	Ser	Glu	Glu
225					230					235					240
Ser	Glu	Glu	Arg	Asp	Thr	Lys	Lys	Thr	Lys	Arg	Lys	Lys	Arg	Glu	Lys
				245					250.					255	
Lys	Ala	His	Thr	Ser	Val	Ala	Asn	Asn	Glu	Ile	Gln	Glu	Arg	Thr	Asn
			260					265					270		
Lys	Arg	Thr	Asn	Trp	Lys	Val	Ala	Thr	Asp	Glu	Arg	Ser	Ala	Glu	Ser
		275					280					285			
Ser	Glu	Asp	Asp												
	290														

<210> 3220

<211> 1023

<212> PRT

<213> Homo sapiens

<400> 3220

Met Ser Leu Gly Val Ala Ala Ile Asn Gln Ala Ile Lys Glu Gly Lys

1 5 10 15

Ala Ala Gln Thr Glu Arg Val Leu Arg Asn Pro Ala Val Ala Leu Arg
20 25 30

Gly Val Val Pro Asp Cys Ala Asn Gly Tyr Gln Arg Ala Leu Glu Ser
35 40 45

Ala Met Ala Lys Lys Gln Arg Pro Ala Asp Thr Ala Phe Trp Val Gln
50 55 60

His Asp Met Lys Asp Gly Thr Ala Tyr Tyr Phe His Leu Gln Thr Phe
65 70 75 80

Gln Gly Ile Trp Glu Gln Pro Pro Gly Cys Pro Leu Asn Thr Ser His

85 90 95

Leu Thr Arg Glu Glu Ile Gln Ser Ala Val Thr Lys Val Thr Ala Ala 100 105 110

Tyr Asp Arg Gln Gln Leu Trp Lys Ala Asn Val Gly Phe Val Ile Gln
115 120 125

Leu Gln Ala Arg Leu Arg Gly Phe Leu Val Arg Gln Lys Phe Ala Glu 130 135 140

His Ser His Phe Leu Arg Thr Trp Leu Pro Ala Val Ile Lys Ile Gln 145 150 155 160

Ala His Trp Arg Gly Tyr Arg Gln Arg Lys Ile Tyr Leu Glu Trp Leu
165 170 175

Gln	Tyr	Phe	Lys	Ala	Asn	Leu	Asp	Ala	Ile	Ile	Lys	Ile	Gln	Ala	Trp
			180					185					190		
Ala	Arg	Met	Trp	Ala	Ala	Arg	Arg	Gln	Tyr	Leu	Arg	Arg	Leu	His	Tyr
		195					200					205			
Phe	Gln	Lys	Asn	Val	Asn	Ser	Ile	Val	Lys	Ile	Gln	Ala	Phe	Phe	Arg
	210					215					220				
Ala	Arg	Lys	Ala	Gln	Asp	Asp	Tyr	Arg	Ile	Leu	Val	His	Ala	Pro	His
225					230					235					240
Pro	Pro	Leu	Ser	Val	Val	Arg	Arg	Phe	Ala	His	Leu	Leu	Asn	Gln	Ser
				245					250					255	
Gln	Gln	Asp	Phe	Leu	Ala	Glu	Ala	Glu	Leu	Leu	Lys	Leu	Gln	Glu	Glu
			260					265					270		
Val	Val	Arg	Lys	Ile	Arg	Ser	Asn	Gln	Gln	Leu	Glu	Gln	Asp	Leu	Asn
		275					280					285			
Ile	Met	Asp	Ile	Lys	Ile	Gly	Leu	Leu	Val	Lys	Asn	Arg	Ile	Thr	Leu
	290					295					300				
Gln	Glu	Val	Val	Ser	His	Cys	Lys	Lys	Leu	Thr	Lys	Arg	Asn	Lys	Glu
305					310					315					320
Gln	Leu	Ser	Asp	Met	Met	Val	Leu	Asp	Lys	Gln	Lys	Gly	Leu	Lys	Ser
				325					330					335	
Leu	Ser	Lys	Glu	Lys	Arg	Gln	Lys	Leu	Glu	Ala	Tyr	Gln	His	Leu	Phe
			340					345					350		
Tyr	Leu	Leu	Gln	Thr	Gln	Pro	Ile	Tyr	Leu	Ala	Lys	Leu	Ile	Phe	Gln
		355					360					365			
Met	Pro	Gln	Asn	Lys	Thr	Thr	Lys	Phe	Met	Glu	Ala	Val	Ile	Phe	Ser
	370					375					380				
Leu	Tyr	Asn	Tyr	Ala	Ser	Ser	Arg	Arg	Glu	Ala	Tyr	Leu	Leu	Leu	Gln
385					390					395					400
Leu	Phe	Lys	Thr	Ala	Leu	Gln	Glu	Glu	Ile	Lys	Ser	Lys	Val	Glu	Gln

					405					410					415	
Pr	0	Gln	Asp	Val	Val	Thr	Gly	Asn	Pro	Thr	Val	Val	Arg	Leu	Val	Val
				420					425					430		
Aı	g	Phe	Tyr	Arg	Asn	Gly	Arg	Gly	Gln	Ser	Ala	Leu	Gln	Glu	Ile	Leu
			435					440					445			
GJ	lу	Lys	Val	Ile	Gln	Asp	Val	Leu	Glu	Asp	Lys	Val	Leu	Ser	Val	His
		450					455					460				
Tł	ır	Asp	Pro	Val	His	Leu	Tyr	Lys	Asn	Trp	Ile	Asn	Gln	Thr	Glu	Ala
46	55					470					475					480
G1	ln	Thr	Gly	Gln	Arg	Ser	His	Leu	Pro	Tyr	Asp	Val	Thr	Pro	Glu	Gln
					485					490					495	
Αl	la	Leu	Ser	His	Pro	Glu	Val	Gln	Arg	Arg	Leu	Asp	Ile	Ala	Leu	Arg
				500					505					510		
As	sn	Leu	Leu	Ala	Met	Thr	Asp	Lys	Phe	Leu	Leu	Ala	Ile	Thr	Ser	Ser
			515					520					525			
Va	al	Asp	Gln	Ile	Pro	Tyr	Gly	Met	Arg	Tyr	Val	Ala	Lys	Val	Leu	Lys
		530					535					540				
Αl	la	Thr	Leu	Ala	Glu	Lys	Phe	Pro	Asp	Ala	Thr	Asp	Ser	Glu	Val	Tyr
54	15					550					555					560
Ly	/S	Val	<u>V</u> al	Gly	Asn	Leu	Leu	Tyr	Tyr	Arg	Phe	Leu	Asn	Pro	Ala	Val
					565					570					575	
Va	al	Ala	Pro	Asp	Ala	Phe	Asp	Ile	Val	Ala	Met	Ala	Ala	Gly	Gly	Ala
				580					585					590		
Le	eu	Ala	Ala	Pro	Gln	Arg	His	Ala	Leu	Gly	Ala	Val	Ala	Gln	Leu	Leu
			595					600					605			
Gl	n	His	Ala	Ala	Ala	Gly	Lys	Ala	Phe	Ser	Gly	Gln	Ser	Gln	His	Leu
		610					615					620				
Aı	g	Val	Leu	Asn	Asp	Tyr	Leu	Glu	Glu	Thr	His	Leu	Lys	Phe	Arg	Lys
62	25					630					635					640

	Phe	Ile	His	Arg	Ala	Cys	Gln	Val	Pro	Glu	Pro	Glu	Glu	Arg	Phe	Ala
					645					650					655	
	Val	Asp	Glu	Tyr	Ser	Asp	Met	Val	Ala	Val	Ala	Lys	Pro	Met	Val	Tyr
				660					665					670		
	Ile	Thr	Val	Gly	Glu	Leu	Val	Asn	Thr	His	Arg	Leu	Leu	Leu	Glu	His
			675					680					685			
	Gln	Asp	Cys	Ile	Ala	Pro	Asp	His	Gln	Asp	Pro	Leu	His	Glu	Leu	Leu
		690					695					700				
	Glu	Asp	Leu	Gly	Glu	Leu	Pro	Thr	Ile	Pro	Asp	Leu	Ile	Gly	Glu	Ser
	705					710					715					720
	Ile	Ala	Ala	Asp	Gly	His	Thr	Asp	Leu	Ser	Lys	Leu	Glu	Val	Ser	Leu
					725					730					735	
	Thr	Leu	Thr	Asn	Lys	Phe	Glu	Gly	Leu	Glu	Ala	Asp	Ala	Asp	Asp	Ser
				740					745					750		
	Asn	Thr	Arg	Ser	Leu	Leu	Leu	Ser	Thr	Lys	Gln	Leu	Leu	Ala	Asp	Ile
			755					760					765			
	Ile	Gln	Phe	His	Pro	Gly	Asp	Thr	Leu	Lys	Glu	Ile	Leu	Ser	Leu	Ser
		770					775					780				
	Ala	Ser	Arg	Glu	Gln	Glu	Ala	Ala	His	Lys	GÌn	Leu	Met	Ser	Arg	Arg
	785					790					795					800
	Gln	Ala	Cys	Thr	Ala	Gln	Thr	Pro	Glu	Pro	Leu	Arg	Arg	His	Arg	Ser
					805					810					815	
	Leu	Thr	Ala	His	Ser	Leu	Leu	Pro	Leu	Ala	Glu	Lys	Gln	Arg	Arg	Val
				820					825					830		
	Leu	Arg	Asn	Leu	Arg	Arg	Leu	Glu	Ala	Leu	Gly	Leu	Val	Ser	Ala	Arg
			835					840					845			
	Asn	Gly	Tyr	Gln	Gly	Leu	Val	Asp	Glu	Leu	Ala	Lys	Asp	Ile	Arg	Asn
		850					855					860				
,	Gln	His	Arg	His	Aro	His	Aro	Aro	Lvs	Ala	Glu	Leu	Val	Lvs	Len	Gln

Ala Thr Leu Gln Gly Leu Ser Thr Lys Thr Thr Phe Tyr Glu Glu Gln Gly Asp Tyr Tyr Ser Gln Tyr Ile Arg Ala Cys Leu Asp His Leu Ala Pro Asp Ser Lys Ser Ser Gly Lys Gly Lys Lys Gln Pro Ser Leu His Tyr Thr Ala Ala Gln Leu Leu Glu Lys Gly Val Leu Val Glu Ile Glu Asp Leu Pro Ala Ser His Phe Arg Asn Val Ile Phe Asp Ile Thr Pro Gly Asp Glu Ala Gly Lys Phe Glu Val Asn Ala Lys Phe Leu Gly Val Asp Met Glu Arg Phe Gln Leu His Tyr Gln Asp Leu Leu Gln Leu Gln Tyr Glu Gly Val Ala Val Met Lys Leu Phe Asn Lys Ala Lys Val Asn Val Asn Leu Leu IIe Phe Leu Leu Asn Lys Lys Phe Leu Arg Lys

<210> 3221

<211> 791

<212> PRT

<213> Homo sapiens

<400> 3221

Met Asp Gly Glu Ser Glu Val Asp Phe Ser Ser Asn Ser Ile Thr Pro

1 5 10 15

Leu 1	rp	Arg	Arg	Arg	Ser	Ile	Pro	Gln	Pro	His	Gln	Leu	Leu	Gly	Arg
			20					25					30		
Ser I	ys	Pro	Arg	Pro	Gln	Ser	Tyr	Gln	Ser	Pro	Asn	Gly	Leu	Leu	Ile
		35					40					45			
Thr A	sp	Phe	Pro	Val	Glu	Asp	Gly	Gly	Thr	Leu	Ser	Ala	Ala	Gln	Ile
	50					55					60				
Pro A	lla	Gln	Val	Pro	Thr	Ala	Ser	Asp	Ser	Arg	Thr	Val	His	Arg	Ser
65					70					75					80
Pro I	eu	Leu	Leu	Gly	Ala	Gln	Arg	Arg	Ala	Val	Ala	Asn	Gly	Gly	Thr
				85					90					95	
Ala S	Ser	Pro	Glu	Tyr	Arg	Ala	Ala	Ser	Pro	Arg	Leu	Arg	Arg	Pro	Lys
			100					105					110		
Ser F	ro	Lys	Leu	Pro	Lys	Ala	Val	Pro	Gly	Gly	Ser	Pro	Lys	Ser	Pro
		115					120					125			
Ala A	lsn	Gly	Ala	Val	Thr	Leu	Pro	Ala	Pro	Pro	Pro	Pro	Pro	Val	Leu
]	.30					135					140				
Arg F	ro	Pro	Arg	Thr	Pro	Asn	Ala	Pro	Ala	Pro	Cys	Thr	Pro	Glu	Glu
145					150					155					160
Asp I	eu	Thr	Gly	Leu	Thr	Ala	Ser	Pro	Val	Pro	Ser	Pro	Thr	Ala	Asn
				165					170					175	
Gly I	eu	Ala	Ala	Asn	Asn	Asp	Ser	Pro	Gly	Ser	Gly	Ser	Gln	Ser	Gly
			180					185					190		
Arg I	.ys	Ala	Lys	Asp	Pro	Glu	Arg	Gly	Leu	Phe	Pro	Gly	Pro	Gln	Lys
		195					200					205			
Ser S	Ser	Ser	Glu	Gln	Lys	Leu	Pro	Leu	Gln	Arg	Leu	Pro	Ser	Gln	Glu
2	210					215					220				
Asn (lu	Leu	Leu	Glu	Asn	Pro	Ser	Val	Val	Leu	Ser	Thr	Asn	Ser	Pro
225					230					235					240
Ala A	lla	Leu	Lys	Val	Gly	Lvs	Gln	Gln	Ile	Ile	Pro	Lys	Ser	Leu	Ala

				245					250					255	
Ser	Glu	Ile	Lys	Ile	Ser	Lys	Ser	Asn	Asn	Gln	Asn	Val	Glu	Pro	His
			260					265					270		
Lys	Arg	Leu	Leu	Lys	Val	Arg	Ser	Met	Val	Glu	Gly	Leu	Gly	Gly	Pro
		275					280					285			
Leu	Gly	His	Ala	Gly	Glu	Glu	Ser	Glu	Val	Asp	Asn	Asp	Val	Asp	Ser
	290					295					300				
Pro	Gly	Ser	Leu	Arg	Arg	Gly	Leu	Arg	Ser	Thr	Ser	Tyr	Arg	Arg	Ala
305					310					315					320
Val	Val	Ser	Gly	Phe	Asp	Phe	Asp	Ser	Pro	Thr	Ser	Ser	Lys	Lys	Lys
				325					330					335	
Asn	Arg	Met	Ser	Gln	Pro	Val	Leu	Lys	Val	Val	Met	Glu	Asp	Lys	Glu
			340					345					350		
Lys	Phe	Ser	Ser	Leu	Gly	Arg	Ile	Lys	Lys	Lys	Met	Leu	Lys	Gly	Glr
		355					360					365			
Gly	Thr	Phe	Asp	Gly	Glu	Glu	Asn	Ala	Val	Leu	Tyr	Gln	Asn	Tyr	Lys
	370					375					380				
Glu	Lys	Ala	Leu	Asp	Ile	Asp	Ser	Asp	Glu	Glu	Ser	Glu	Pro	Lys	Glu
385					390					395					400
Gln	Lys	Ser	Asp	Glu	Lys	Ile	Val	Ile	His	His	Lys	Pro	Leu	Arg	Ser
				405					410					415	
Thr	Trp	Ser	Gln	Leu	Ser	Ala	Val	Lys	Arg	Lys	Gly	Leu	Ser	Gln	Thr
			420					425					430		
Val	Ser	Gln	Glu	Glu	Arg	Lys	Arg	Gln	Glu	Ala	Ile	Phe	Glu	Val	Ιlε
		435					440					445			
Ser	Ser	Glu	His	Ser	Tyr	Leu	Leu	Ser	Leu	Glu	Ile	Leu	Ile	Arg	Met
	450					455					460				
Phe	Lys	Asn	Ser	Lys	Glu	Leu	Ser	Asp	Thr	Met	Thr	Lys	Thr	Glu	Arg
465					470					475					480

His	His	Leu	Phe	Ser	Asn	Ile	Thr	Asp	Val	Cys	Glu	Ala	Ser	Lys	Lys
				485					490					495	
Phe	Phe	Ile	Glu	Leu	Glu	Ala	Arg	His	Gln	Asn	Asn	Ile	Phe	Ile	Asp
			500					505					510		
Asp	Ile	Ser	Asp	Ile	Val	Glu	Lys	His	Thr	Ala	Ser	Thr	Phe	Asp	Pro
		515					520					525			
Tyr	Val	Lys	Tyr	Cys	Thr	Asn	Glu	Val	Tyr	Gln	Gln	Arg	Thr	Leu	Gln
	530					535					540				
Lys	Leu	Leu	Ala	Thr	Asn	Pro	Ser	Phe	Lys	Glu	Val	Leu	Ser	Arg	Ile
545					550					555					560
Glu	Ser	His	Glu	Asp	Cys	Arg	Asn	Leu	Pro	Met	Ile	Ser	Phe	Leu	Ile
				565					570					575	
Leu	Pro	Met	Gln	Arg	Val	Thr	Arg	Leu	Pro	Leu	Leu	Met	Asp	Thr	Ile
			580					585					590		
Cys	Gln	Lys	Thr	Pro	Lys	Asp	Ser	Pro	Lys	Tyr	Glu	Val	Cys	Lys	Arg
		595					600					605			
Ala	Leu	Lys	Glu	Val	Ser	Lys	Leu	Val	Arg	Leu	Cys	Asn	Glu	Gly	Ala
	610					615					620				
Arg	Lys	Met	Glu	Arg	Thr	Glu	Met	Met	Tyr	Thr	Ile	Asn	Ser	Gln	Leu
625					630					635					640
Glu	Phe	Lys	Ile	Lys	Pro	Phe	Pro	Leu	Val	Ser	Ser	Ser	Arg	Trp	Leu
				645					650					655	
Val	Lys	Arg	Gly	Glu	Leu	Thr	Ala	Tyr	Val	Glu	Asp	Thr	Val	Leu	Phe
			660					665					670		
Ser	Arg	Arg	Thr	Ser	Lys	Gln	Gln	Val	Tyr	Phe	Phe	Leu	Phe	Asn	Asp
		675					680					685			
Val	Leu	Ile	Ile	Thr	Lys	Lys	Lys	Ser	Glu	Glu	Ser	Tyr	Asn	Val	Asn
	690					695					700				
Asp	Tyr	Ser	Leu	Arg	Asp	Gln	Leu	Leu	Val	Glu	Ser	Cys	Asp	Asn	Glu

Glu Leu Asn Ser Ser Pro Gly Lys Asn Ser Ser Thr Met Leu Tyr Ser Arg Gln Ser Ser Ala Ser His Leu Phe Thr Leu Thr Val Leu Ser Asn His Ala Asn Glu Lys Val Glu Met Leu Leu Gly Ala Glu Thr Gln Ser Glu Arg Ala Arg Trp Ile Thr Ala Leu Gly His Ser Ser Gly Lys Pro Pro Ala Asp Arg Thr Cys Gly

<210> 3222

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3222

Met Arg Val Ser Met Gln Gln Thr Ala Gln Gly Gly Pro His Gly Gln Arg Arg Asp Ala Asp Leu Arg Pro Ala Pro Pro Lys Leu Pro Val Gln Met Pro Leu Thr Pro Ser Asn Gln Gln Gln Asp Arg His Cys Val Arg Lys Val Gly Arg His Pro His Pro Cys Thr Ala Ala Ala Thr Pro Leu Ala Pro Asn Ala Lys Ala Phe Lys Asp Ala Ala Gln Lys His His Gln Gln His Lys Gly Arg Ser Gln Glu Pro Glu Leu Thr Ser Leu Pro 90 95 85 Pro Ser Ser Glu Val Ser Phe Pro Thr Phe Ser Glu Leu Ser Val Ser 105 110 100 Met Ala Ser Ser Ala Thr Ser Ala Thr Ser Pro Asp Val Leu Ala Ser 120 115 125 Val Ser Ile Ala Ser Ser Trp Pro Ser Ser Ala Arg Cys Ser Lys Pro 140 130 135 Thr Ala Val Glu Ala Asn Val Ile Ala Leu Pro Leu Arg Arg Trp His 160 145 150 155 Arg Asp Trp Gln Arg Cys His Leu Gly Val Cys Val Leu Ser Leu Arg 165 170 175 Val Gln Ala Ser Pro Ala Pro Ala Val Leu Gly Pro Gln Met Arg 180 185 190 Asp His Gly His Glu Asp Gln Pro Pro Arg Gln Pro Leu Pro Ser Ser 195 200 205 Leu Gly Ser Gly Val Phe 210

<210> 3223

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3223

Met Ile Phe Lys Phe Pro Ser Ser Phe Leu Val Leu Trp Ser Leu Leu

1 5 10 15

Arg Cys Gly Arg Lys Gln Phe Val Ser Cys Ala Glu Gln Phe Arg Ser

Pro Gly Ser Leu Ser Pro Gly Pro Lys Pro Pro Arg Arg Glu Ser Phe Ser Gly Pro Trp Glu Gln Val Leu Lys Gly Phe Leu Leu Lys Arg Gly Arg Gln Pro Ala Val Arg Val Arg Ile Val Val Pro Glu Pro Tyr Gly Gln Ser Phe Glu Arg Ile Gly Leu Gly Arg Phe Ser Gly Gln Lys Arg Leu Ile Ser Ile Leu Gly Ala Leu Ser His Lys Gly Tyr Leu Ile Glu Arg Lys Asn Gly Val Cys Gly Ser Phe Ala Pro Ile Ser Lys Trp Val Asp Ser Gly Cys Lys Gly Ile Phe Ser His Phe Ser Gln Gln Arg Lys Ala Phe Ser Ala Lys Ile Leu Lys Gly Glu <210> 3224 <211> 751 <212> PRT <213> Homo sapiens <400> 3224

Met Arg Leu Lys Ile Ser Leu Leu Lys Glu Pro Lys His Gln Glu Leu

1 5 10 15

Val Ser Cys Val Gly Trp Thr Thr Ala Glu Glu Leu Tyr Ser Cys Ser

20 25 30

Asp	Asp	His	Gln	Ile	Val	Lys	Trp	Asn	Leu	Leu	Thr	Ser	Glu	Thr	Thr
		35					40					45			
Gln	Ile	Val	Lys	Leu	Pro	Asp	Asp	Ile	Tyr	Pro	Ile	Asp	Phe	His	Trp
	50					55					60				
Phe	Pro	Lys	Ser	Leu	Gly	Val	Lys	Lys	Gln	Thr	Gln	Ala	Glu	Ser	Phe
65					70					75					80
Val	Leu	Thr	Ser	Ser	Asp	Gly	Lys	Phe	His	Leu	Ile	Ser	Lys	Leu	Gly
				85					90					95	
Arg	Val	Glu	Lys	Ser	Val	Glu	Ala	His	Cys	Gly	Ala	Val	Leu	Ala	Gly
			100					105					110		
Arg	Trp	Asn	Tyr	Glu	Gly	Thr	Ala	Leu	Val	Thr	Val	Gly	Glu	Asp	Gly
		115					120					125			
Gln	Ile	Lys	Ile	Trp	Ser	Lys	Thr	Gly	Met	Leu	Arg	Ser	Thr	Leu	Ala
	130					135					140				
Gln	Gln	Gly	Thr	Pro	Val	Tyr	Ser	Val	Ala	Trp	Gly	Pro	Asp	Ser	Glu
145					150					155					160
Lys	Val	Leu	Tyr	Thr	Ala	Gly	Lys	Gln	Leu	Ile	Ile	Lys	Pro	Leu	Gln
				165					170					175	
Pro	Asn	Ala	Lys	Val	Leu	Gln	Trp	Lys	Ala	His	Asp	Gly	Ile	Ile	Leu
			180					185					190		
Lys	Val	Asp	Trp	Asn	Ser	Val	Asn	Asp	Leu	Ile	Leu	Ser	Ala	Gly	Glu
		195					200					205			
Asp	Cys	Lys	Tyr	Lys	Val	Trp	Asp	Ser	Tyr	Gly	Arg	Pro	Leu	Tyr	Asn
	210					215					220				
Ser	Gln	Pro	His	Glu	His	Pro	Ile	Thr	Ser	Val	Ala	Trp	Ala	Pro	Asp
225					230					235					240
Gly	Glu	Leu	Phe	Ala	Val	Gly	Ser	Phe	His	Thr	Leu	Arg	Leu	Cys	Asp
				245					250					255	
Lvs	Thr	Glv	Trp	Ser	Tvr	Ala	Leu	Glu	Lvs	Pro	Asn	Thr	Glv	Ser	Ιlε

			260					265					270		
Phe	Asn	Ile	Ala	Trp	Ser	Ile	Asp	Gly	Thr	Gln	Ile	Ala	Gly	Ala	Cys
		275					280					285			•
Gly	Asn	Gly	His	Val	Val	Phe	Ala	His	Val	Val	Glu	Gln	His	Trp	Glu
	290					295					300				
Trp	Lys	Asn	Phe	Gln	Val	Thr	Leu	Thr	Lys	Arg	Arg	Ala	Met	Gln	Val
305					310					315					320
Arg	Asn	Val	Leu	Asn	Asp	Ala	Val	Asp	Leu	Leu	Glu	Phe	Arg	Asp	Arg
				325					330					335	
Val	Ile	Lys	Ala	Ser	Leu	Asn	Tyr	Ala	His	Leu	Val	Val	Ser	Thr	Ser
			340					345					350		
Leu	Gln	Cys	Tyr	Val	Phe	Ser	Thr	Lys	Asn	Trp	Asn	Thr	Pro	Ile	Ile
		355					360					365			
Phe	Asp	Leu	Lys	Glu	Gly	Thr	Val	Ser	Leu	Ile	Leu	Gln	Ala	Glu	Arg
	370					375					380				
His	Phe	Leu	Leu	Val	Asp	Gly	Ser	Ser	Ile	Tyr	Leu	Tyr	Ser	Tyr	Glu
385					390					395					400
Gly	Arg	Phe	Ile	Ser	Ser	Pro	Lys	Phe	Pro	Gly	Met	Arg	Thr	Asp	Ile
				405					410					415	
Leu	Asn	Ala	Gln	Thr	Val	Ser	Leu	Ser	Asn	Asp	Thr	Ile	Ala	Ile	Arg
			420					425					430		
Asp	Lys	Ala	Asp	Glu	Lys	Ile	Ile	Phe	Leu	Phe	Glu	Ala	Ser	Thr	Gly
		435					440					445			
Lys	Pro	Leu	Gly	Asp	Gly	Lys	Phe	Leu	Ser	His	Lys	Asn	Glu	Ile	Leu
	450					455					460				
Glu	Ile	Ala	Leu	Asp	Gln	Lys	Gly	Leu	Thr	Asn	Asp	Arg	Lys	Ile	Ala
465					470					475					480
Phe	Ile	Asp	Lys	Asn	Arg	Asp	Leu	Cys	Ile	Thr	Ser	Val	Lys	Arg	Phe
				485					490					495	

Gly	Lys	Glu	Glu	Gln	Ile	Ile	Lys	Leu	Gly	Thr	Met	Val	His	Thr	Leu .	
			500					505					510			
Ala	Trp	Asn	Asp	Thr	Cys	Asn	Ile	Leu	Cys	Gly	Leu	Gln	Asp	Thr	Arg	
		515					520					525				
Phe	Ile	Val	Trp	Tyr	Tyr	Pro	Asn	Thr	Val	Tyr	Val	Asp	Arg	Asp	Ile	
	530					535					540					
Leu	Pro	Lys	Thr	Leu	Tyr	Glu	Arg	Asp	Ala	Ser	Glu	Phe	Ser	Lys	Asn	
545					550					555					560	
Pro	His	Ile	Val	Ser	Phe	Val	Gly	Asn	Gln	Val	Thr	Ile	Arg	Arg	Ala	
				565					570					575		
Asp	Gly	Ser	Leu	Val	His	Ile	Ser	Ile	Pro	Pro	Tyr	Pro	Ala	Ile	Leu	
			580					585					590			
His	Glu	Tyr	Val	Ser	Ser	Ser	Lys	Trp	Glu	Asp	Ala	Val	Arg	Leu	Cys	
		595					600					605				
Arg	Phe	Val	Lys	Glu	Gln	Thr	Met	Trp	Ala	Cys	Leu	Ala	Ala	Met	Ala	
	610					615					620					
Val	Ala	Asn	Arg	Asp	Met	Thr	Thr	Ala	Glu	Ile	Ala	Tyr	Ala	Ala	Ile	
625					630					635					640	
Gly	Glu	Ile	Asp	Lys	Val	Gln	Tyr	Ile	Asn	Ser	Ile	Lys	Asn	Leu	Pro	
				645					650					655		
Ser	Lys	Glu	Ser	Lys	Met	Ala	His	Ile	Leu	Leu	Phe	Ser	Gly	Asn	I l <u>.</u> e	
			660					665					670			
Gln	Glu	Ala	Glu	Ile	Val	Leu	·Leu	Gln	Ala	Gly	Leu	Val	Tyr	Gln	Ala	
		675					680					685				
Ile	Gln	Ile	Asn	Ile	Asn	Leu	Tyr	Asn	Trp	Glu	Arg	Ala	Leu	Glu	Leu	
	690					695					700					
Ala	Val	Lys	Tyr	Lys	Thr	His	Val	Asp	Thr	Val	Leu	Ala	Tyr	Arg	Gln	
705					710					715					720	
Lys	Phe	Leu	Glu	Thr	Phe	Gly	Lys	Gln	Glu	Thr	Asn	Lys	Arg	Tyr	Leu	

725 730 735

His Tyr Ala Glu Gly Leu Gln Ile Asp Trp Glu Lys Ile Lys Ala
740 745 750

<210> 3225

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3225

Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln

1 5 10 15

Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile

20 25 30

Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln

35 40 45

Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met

50 55 60

Val Leu Val Gln Gln Leu His Gly Gly Arg Gly His Val Leu Asp Pro

65 70 75 80

Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys

85 90 95

Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly

100 105 110

Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val

115 120 125

Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe

130 135 140

Thr

145

<210> 3226

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3226

Met Ala Phe Gly Glu Pro Pro Ser Gly His Ser Thr Arg His Arg Thr

1 5 10 15

Leu His Gly Leu Ser Phe His Thr Ala Met Gly Met Ala Trp Ser Leu

20 25 30

His Tyr Gln Gly Gln Gly Gly Thr Leu Cys Leu Val Gly Val Ser Thr

35 40 45

Pro Ser His Asp Lys Ala Val Leu Gln Gly Leu Pro His Phe Ser Val

50 55 60

Asn Leu Gly Val Gln Pro Ser Ala Leu Ala Gly Arg Arg Gly Asp Ala

65 70 75 80

Ser Cys Pro Ser Ser Trp Arg Ser Ala Asp Pro Thr Val Ser Pro Asn

85 90 95

Leu Gly Ala Pro Gly Gly Pro Asn Ala Ile Asp Ala Leu His Gly Glu

100 105 110

Gln Leu Gly Leu Phe Leu Arg Thr Lys Met Gly Arg Asp Pro Lys Asp

115 120 125

Val His Gly Leu Thr Pro Ala Leu Cys Gly Pro Cys Leu Ala Gly Leu

130 135 140

Pro Ser Ser His Ser Pro Gln Phe Ser Cys Asn Thr Ala Pro Leu Lys

145 150 155 160

Met Leu Ser

<210> 3227

<211> 390

<212> PRT

<213> Homo sapiens

<400> 3227

Met Leu Ser Phe Ser Arg Asp Arg Leu Pro Ser Gly Arg Arg Val Ser

1 5 10 15

Gly Lys Cys Pro Pro Pro Pro Leu Gly Met Ala Val Gly Arg Gly Gly

20 25 30

Ser Gly Cys Pro Glu Glu Gly Ser Gly Arg Lys Leu Glu Leu Leu Glu

35 40 45

Ser Gln Leu Pro Ala Glu Arg Ala Arg Glu Glu Ala Gly Pro Ser Val

50 55 60

Arg Arg Pro Arg Asp Lys Leu His Lys Pro Lys Ala Thr Gln Thr Glu

65 70 75 80

Val Lys Pro Ser Val Arg Phe Asn Leu Arg Thr Ser Lys Asp Pro Glu

85 90 95

His Glu Gly Cys Tyr Leu Ser Val Gly His Ser Gln Pro Leu Glu Asp

100 105 110

Cys Ser Phe Asn Met Thr Ala Lys Thr Phe Phe Ile Ile His Gly Trp

115 120 125

Thr Met Ser Gly Ile Phe Glu Asn Trp Leu His Lys Leu Val Ser Ala

130 135 140

Leu	His	Thr	Arg	Glu	Lys	Asp	Ala	Asn	Val	Val	Val	Val	Asp	Trp	Leu
145					150					155					160
Pro	Leu	Ala	His	Gln	Leu	Tyr	Thr	Asp	Ala	Val	Asn	Asn	Thr	Arg	Val
				165					170					175	
Val	Gly	His	Ser	Ile	Ala	Arg	Met	Leu	Asp	Trp	Leu	Gln	Glu	Lys	Asp
			180					185					190		
Asp	Phe	Ser	Leu	Gly	Asn	Val	His	Leu	Ile	Gly	Tyr	Ser	Leu	Gly	Ala
		195					200					205			
His	Val	Ala	Gly	Tyr	Ala	Gly	Asn	Phe	Val	Lys	Gly	Thr	Val	Gly	Arg
	210					215					220				
Ile	Thr	Gly	Leu	Asp	Pro	Ala	Gly	Pro	Met	Phe	Glu	Gly	Ala	Asp	Ile
225					230					235					240
His	Lys	Arg	Leu	Ser	Pro	Asp	Asp	Ala	Asp	Phe	Val	Asp	Val	Leu	His
				245					250					255	
Thr	Tyr	Thr	Arg	Ser	Phe	Gly	Leu	Ser	Ile	Gly	Ile	Gln	Met	Pro	Val
			260					265					270		
Gly	His	Ile	Asp	Ile	Tyr	Pro	Asn	Gly	Gly	Asp	Phe	Gln	Pro	Gly	Cys
		275					280					285			
Gly	Leu	Asn	Asp	Val	Leu	Gly	Ser	Ile	Ala	Tyr	Gly	Thr	Ile	Thr	Glu
	290					295					300				
Val	Val	Lys	Cys	Glu	His	Glu	Arg	Ala	Val	His	Leu	Phe	Val	Asp	Ser
305					310					315					320
Leu	Val	Asn	Gln	Asp	Lys	Pro	Ser	Phe	Ala	Phe	Gln	Cys	Thr	Asp	Ser
				325					330					335	
Asn	Arg	Phe	Lys	Lys	Gly	Ile	Cys	Leu	Ser	Cys	Arg	Lys	Asn	Arg	Cys
			340					345					350		
Asn	Ser	Ile	Gly	Tyr	Asn	Ala	Lys	Lys	Met	Arg	Asn	Lys	Arg	Asn	Ser
		355					360					365			
Lvs	Met	Tvr	Leu	Lvs	Thr	Arg	Ala	Glv	Met	Pro	Phe	Arg	Glv	Asn	Leu

370 375 380

Gln Ser Leu Glu Cys Pro

385 390

<210> 3228

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3228

Met Val Ser Cys Leu Val Glu Gly Leu Lys Lys Ala Ala Tyr Lys Val

1 5 10 15

Val Asn Tyr Asp Lys Pro Lys Glu Ala Thr Gln Gly Lys Asp Glu Asn

20 25 30

Pro Ala Gln Phe Met Ala Arg Leu Val Ala Thr Leu Arg Arg Phe Thr

35 40 45

Ala Leu Asp Pro Glu Gly Pro Glu Gly Cys Leu Ile Leu Asn Met His

50 55 60

Phe Ile Ile Gln Ser Ala Pro Asp Ile Arg Lys Lys Phe Gln Lys Leu

65 70 75 80

Asp Ser Ser Pro Gln Thr Pro Gln Gln Asp Leu Ile Asn Leu Ala Phe

85 90 95

Lys Val Phe Asn Asn Arg Glu Glu Thr Ala Lys

100 105

<210> 3229

<211> 277

<212> PRT

<213> Homo sapiens

<400> 3229

Met Ser Arg Glu Phe Arg Gly His Arg Asn Cys Val Leu Thr Leu Ala 1 5 10 15

Tyr Ser Ala Pro Trp Asp Leu Pro Ser Thr Pro Cys Ala Glu Glu Ala 20 25 30

Ala Ala Gly Gly Leu Leu Val Thr Gly Ser Thr Asp Gly Thr Ala Lys
35 40 45

Val Trp Gln Val Ala Ser Gly Cys Cys His Gln Thr Leu Arg Gly His
50 55 60

Thr Gly Ala Val Leu Cys Leu Val Leu Asp Thr Pro Gly His Thr Ala
65 70 75 80

Phe Thr Gly Ser Thr Asp Ala Thr Ile Arg Ala Trp Asp Ile Leu Ser

85 90 95

Gly Glu Gln Leu Arg Val Phe Arg Glu His Arg Gly Ser Val Ile Cys 100 105 110

Leu Glu Cys Ser Arg Ala Ala Gly Thr Leu Ala Pro Gly Pro Ser Thr
115 120 125

Arg Ser Leu Glu Ser Cys Gly Gly Cys Ser Gly Ala Thr His Ser Ser 130 135 140

Ser Thr Ala Ser Arg Cys Thr Ala Arg Cys Ser Thr Pro Pro Arg Thr
145 150 155 160

Thr Ala Pro Cys Ala Ser Gly Thr Cys Ala Gly Ser Glu Val Pro Arg
165 170 175

Gly Pro Leu Arg Pro Arg Ala Ala Ser Arg Gly Ser Ser Ala Thr Arg 180 185 190

Trp Ala Ala Pro Pro Arg Pro Cys Ser Arg Pro Asp Pro Ala Gly Pro

195 200 205 Leu Gln Thr Pro Ala Gln Thr Pro Ser Gly Ser Gln Ser Ala Pro Pro 215 220 210 Cys Tyr Pro Arg Trp Trp Arg Pro Met Ala Gly Glu Gly Arg Gly Ala 230 235 240 225 Arg Lys Pro Gly Arg Glu Glu Ser Pro Ser Gln Ala Ser Gly Phe Ser 250 245 255

Leu Val Ala Arg Arg Arg Trp Glu Arg Glu Cys Ser Pro Trp Gly Pro 260 265 270

Pro Pro Phe Pro Phe 275

<210> 3230

<211> 586

<212> PRT

<213> Homo sapiens

<400> 3230

Met Lys Tyr Ile Leu Val Thr Gly Gly Val Ile Ser Gly Ile Gly Lys

1 5 10 15

Gly Ile Ile Ala Ser Ser Ile Gly Thr Ile Leu Lys Ser Cys Gly Leu

20 25 30

Arg Val Thr Ala Ile Lys Ile Asp Pro Tyr Ile Asn Ile Asp Ala Gly

35 40 45

Thr Phe Ser Pro Tyr Glu His Gly Glu Val Phe Val Leu Asn Asp Gly

50 55 60
Gly Glu Val Asp Leu Asp Leu Gly Asn Tyr Glu Arg Phe Leu Asp Ile
65 70 75 80

Asn	Leu	Tyr	Lys	Asp	Asn	Asn	Ile	Thr	Thr	Gly	Lys	Ile	Tyr	Gln	His
				85					90					95	
Val	Ile	Asn	Lys	Glu	Arg	Arg	Gly	Asp	Tyr	Leu	Gly	Lys	Thr	Val	Gln
			100					105					110		
Val	Val	Pro	His	Ile	Thr	Asp	Ala	Val	Gln	Glu	Trp	Val	Met	Asn	Gln
		115					120					125			
Ala	Lys	Val	Pro	Val	Asp	Gly	Asn	Lys	Glu	Glu	Pro	Gln	Ile	Cys	Val
	130					135					140				
Ile	Glu	Leu	Gly	Gly	Thr	Ile	Gly	Asp	Ile	Glu	Gly	Met	Pro	Phe	Val
145					150					155					160
Glu	Ala	Phe	Arg	Gln	Phe	Gln	Phe	Lys	Ala	Lys	Arg	Glu	Asn	Phe	Cys
				165					170					175	
Asn	Ile	His	Val	Ser	Leu	Val	Pro	Gln	Leu	Ser	Ala	Thr	Gly	Glu	Gln
			180					185					190		
Lys	Thr	Lys	Pro	Thr	Gln	Asn	Ser	Val	Arg	Ala	Leu	Arg	Gly	Leu	Gly
		195					200					205			
Leu	Ser	Pro	Asp	Leu	Ile	Val	Cys	Arg	Ser	Ser	Thr	Pro	Ile	Glu	Met
	210					215					220				
Ala	Val	Lys	Glu	Lys	Ile	Ser	Met	Phe	Cys	His	Val	Asn	Pro	Glu	Gln
225					230					235					240
Val	Ile	Cys	Ile	His	Asp	Val	Ser	Ser	Thr	Tyr	Arg	Val	Pro	Val	Leu
				245					250					255	
Leu	Glu	Glu	Gln	Ser	Ile	Val	Lys	Tyr	Phe	Lys	Glu	Arg	Leu	His	Leu
			260					265					270		
Pro	Ile	Gly	Asp	Ser	Ala	Ser	Asn	Leu	Leu	Phe	Lys	Trp	Arg	Asn	Met
		275					280					285			
Ala	Asp	Arg	Tyr	Glu	Arg	Leu	Gln	Lys	Ile	Cys	Ser	Ile	Ala	Leu	Val
	290					295					300				
Glv	Lvs	Tvr	Thr	Lvs	Leu	Arg	Asp	Cvs	Tvr	Ala	Ser	Val	Phe	Lvs	Ala

,	305					310					315					320
	Leu	Glu	His	Ser	Ala	Leu	Ala	Ile	Asn	His	Lys	Leu	Asn	Leu	Met	Tyr
					325					330					335	
	Ile	Asp	Ser	Ile	Asp	Leu	Glu	Lys	Ile	Thr	Glu	Thr	Glu	Asp	Pro	Val
				340					345					350		
	Lys	Phe	His	Glu	Ala	Trp	Gln	Lys	Leu	Cys	Lys	Ala	Asp	Gly	Ile	Leu
			355		•			360					365			
	Val	Pro	Gly	Gly	Phe	Gly	Ile	Arg	Gly	Thr	Leu	Gly	Lys	Leu	Gln	Ala
		370					375					380				
	Ile	Ser	Trp	Ala	Arg	Thr	Lys	Lys	Ile	Pro	Phe	Leu	Gly	Val	Cys	Leu
	385					390				•	395					400
	Gly	Met	Gln	Leu	Ala	Val	Ile	Glu	Phe	Ala	Arg	Asn	Cys	Leu	Asn	Leu
					405					410					415	
	Lys	Asp	Ala	Asp	Ser	Thr	Glu	Phe	Arg	Pro	Asn	Ala	Pro	Val	Pro	Leu
				420					425					430		
	Val	Ile	Asp	Met	Pro	Glu	His	Asn	Pro	Gly	Asn	Leu	Gly	Gly	Thr	Met
			435					440					445			
	Arg	Leu	Gly	Ile	Arg	Arg	Thr	Val	Phe	Lys	Thr	Glu	Asn	Ser	Ile	Leu
		450					455					460				
	Arg	Lys	Leu	Tyr	Gly	Asp	Val	Pro	Phe	Ile	Glu	Glu	Arg	His	Arg	His
	465					470					475					480
	Arg	Phe	Glu	Val	Asn	Pro	Asn	Leu	Ile	Lys	Gln	Phe	Glu	Gln	Asn	Asp
					485					490					495	
	Leu	Ser	Phe	Val	Gly	Gln	Asp	Val	Asp	Gly	Asp	Arg	Met	Glu	Ile	Ile
				500					505					510		
	Glu	Leu	Ala	Asn	His	Pro	Tyr	Phe	Val	Gly	Val	Gln	Phe	His	Pro	Glu
			515					520					525			
	Phe	Ser	Ser	Arg	Pro	Met	Lys	Pro	Ser	Pro	Pro	Tyr	Leu	Gly	Leu	Leu
		530					535					540				

Leu Ala Ala Thr Gly Asn Leu Asn Ala Tyr Leu Gln Gln Gly Cys Lys
545 550 555 560

Leu Ser Ser Ser Asp Arg Tyr Ser Asp Ala Ser Asp Asp Ser Phe Ser
565 570 575

Glu Pro Arg Ile Ala Glu Leu Glu Ile Ser
580 585

<210> 3231

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3231

Met Asn Ile Ile Thr Ser Pro Leu Pro Gly Ser Pro Asn Ser Leu Arg

1 5 10 15

Gly Ser Thr Phe Met Leu Gly Ser Ser Leu Glu Ala Ser Leu Gly Lys
20 25 30

Leu Gln Ser Gln Pro Ser Thr Ser Thr Cys Ser Pro Ser Pro Val Lys
35 40 45

Val Asn Lys Val Arg Val Ser Leu Glu Ala Arg Arg Leu Arg Val Gly
50 55 60

Val Glu Arg Ser His Ser Gln Ser Cys Leu Val Tyr Leu Ser Val Met
65 70 75 80

Lys Lys Arg Glu Glu Thr Asn Lys Met Glu Arg Val Glu Ala Arg Pro 85 90 95

Ser Thr Cys Phe Leu Gly Glu Leu Gly His Ser Gly Gln His Arg Arg 100 105 110

Val Pro Gly Leu Lys Lys Ile Asp His Gln Gln Gly Gln Gly Val Val

115 120 125

Thr Glu Lys Gly Ala Thr Pro Trp Val Asn Lys Gln
130 135 140

<210> 3232

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3232

Met Phe Phe Ile Phe Gln Lys Glu Lys Ala Leu Lys Ile Phe Leu Lys

1 5 10 15

Cys Asp Cys His Leu Phe Ser Thr Lys Asn Phe Leu Arg Phe Phe Lys

20 25 30

Arg Lys Ile Glu Ile Leu Ser Leu Pro Arg Phe Pro Ser Pro Pro Val

35 40 45

Phe Lys Met Lys Ala Gln Val Gln Glu Trp Gly Ala Gln Val Pro Gly

50 55 60

Val Tyr Thr Pro Pro Thr Gln Leu Arg Pro Ala Leu Ala Glu Gly Asp

65 70 75 80

Ala Val Leu Ser Ser Gln Pro Arg Glu Ala Ser Phe Ser Thr Ser Asn

85 90 95

Pro Thr Ala Met Asn Val Asn Ser Leu Gly Cys Phe Gln Lys Gln Glu

100 105 110

Ser Ala

<210> 3233 <211> 454 <212> PRT <213> Homo sapiens <400> 3233 Met Glu Ile His His Phe Leu Leu Lys Lys Arg Lys Gln Ala Asn Leu 15 1 5 10 Ala Gln Leu Leu Arg Asp Ser Gln Asp Arg Asn Lys His Leu Gly Glu 25 30 20 Glu Ile Lys Glu Leu Gln Gln Arg Leu Gly Glu Val Gln Gly Asp Asn 35 40 45 Lys Leu Leu Arg Met Thr Ile Ala Lys Gln Arg Leu Gly Asp Glu Ala ⁵ 55 50 60 Ile Gly Val Arg His Phe Ala Ala His Glu Arg Glu Asp Leu Val Gln 75 80 65 70 Gln Leu Glu Arg Ala Lys Glu Gln Ile Glu Ser Leu Glu His Asp Leu 85 90 95 Gln Ala Ser Val Asp Glu Leu Gln Asp Val Lys Glu Glu Arg Ser Ser 105 110 100 Tyr Gln Asp Lys Val Glu Arg Leu Asn Gln Glu Leu Asn His Ile Leu 125 115 120 Ser Gly His Glu Asn Arg Ile Ile Asp Val Asp Ala Leu Cys Met Glu 130 135 140 Asn Arg Tyr Leu Gln Glu Arg Leu Lys Gln Leu His Glu Glu Val Asn 160

145 150 155 160

Leu Leu Lys Ser Asn Ile Ala Lys Tyr Lys Asn Ala Leu Glu Arg Arg

165 170 175

Lys Asn Ser Lys Gly Gln Gly Lys Ser Ser Ser Ser Ala Leu Thr Gly

			180					185					190		
Val	Leu	Ser	Ala	Lys	Gln	Val	Gln	Asp	Leu	Leu	Ser	Glu	Asp	His	Gly
		195					200					205			
Cys	Ser	Leu	Pro	Ala	Thr	Pro	Gln	Ser	Ile	Ser	Asp	Leu	Lys	Ser	Leu
	210					215					220				
Ala	Thr	Ala	Leu	Leu	Glu	Thr	Ile	His	Glu	Lys	Asn	Met	Val	Ile	Gln
225					230					235					240
His	Gln	Arg	Gln	Thr	Asn	Lys	Ile	Leu	Gly	Asn	Arg	Val	Ala	Glu	Leu
				245					250					255	
Glu	Lys	Lys	Leu	Arg	Thr	Leu	Glu	Val	Ser	Gly	Leu	Trp	Ser	Leu	Pro
			260					265					270		
Gly	Gly	Lys	Asp	Thr	Ile	Leu	Phe	Ser	Asp	Pro	Thr	Leu	Pro	Ser	Gly
		275					280					285			
Gln	Arg	Ser	Arg	Ser	Pro	Leu	Leu	Lys	Phe	Val	Glu	Gln	Pro	Thr	Glu
	290					295					300				
Asn	Lys	Ala	Asp	Pro	Lys	Asp	Gly	Glu	Ala	Gln	Lys	Gln	Glu	Glu	Asp
305					310					315					320
Glu	Ser	Cys	Ala	Ala	Ala	Glu	Ala	Leu	Thr	Ala	Pro	Glu	Asp	Ala	Gly
				325					330					335	
Arg	Pro	Ala	Val	Asn	Ser	Pro	Ala	Asn	Gln	Ser	Arg	Gly	Asn	Gln	Cys
			340					345					350		
Lys	Leu	Phe	His	Pro	Ser	Leu	Pro	Gln	Leu	Pro	Ser	Glu	Glu	Glu	Val
		355					360					365			
Asn	Ser	Leu	Gly	Arg	Glu	Ile	Ile	Lys	Leu	Thr	Lys	Glu	Gln	Ala	Ala
	370					375					380				
Ala	Glu	Leu	Glu	Glu	Val	Arg	Arg	Glu	Ser	Pro	Ile	Glu	Gly	Gln	Arg
385					390					395					400
Ser	Glu	Thr	Gly	Pro	Ala	Pro	Pro	Gly	Leu	Ala	Ile	Gln	Gly	Glu	Leu
				405					410					415	

Pro Lys Ser His Leu Asp Ser Phe Glu Ala Ser Arg Pro Ala Ala Lys
420 425 430

Ala Ser Thr Pro Glu Asp Gly Lys Gly Ile Pro Glu Gly Gly Met
435 440 445

Arg Ser Thr Val Lys Thr 450

<210> 3234

<211> 278

<212> PRT

<213> Homo sapiens

<400> 3234

Met Thr Asp Leu Asn Lys His Ile Lys Gln Ala Gln Thr Gln Arg Lys

1 5 10 15

Gln Leu Leu Glu Glu Ser Arg Glu Leu His Arg Glu Lys Leu Leu Val 20 25 30

Gln Ala Glu Asn Arg Phe Phe Leu Glu Tyr Leu Thr Asn Lys Thr Glu
35 40 45

Glu Tyr Thr Glu Gln Pro Glu Lys Val Trp Asn Ser Tyr Leu Gln Lys
50 55 60

Ser Gly Glu Ile Glu Arg Arg Gln Glu Ser Ala Ser Arg Tyr Ala 65 70 75 80

Glu Gln Ile Ser Val Leu Lys Thr Ala Leu Leu Gln Lys Glu Asn Ile 85 90 95

Gln Ser Ser Leu Lys Arg Lys Leu Gln Ala Met Arg Asp Ile Ala Ile 100 105 110

Leu Lys Glu Lys Glu Glu Lys Glu Ile Gln Thr Leu Gln Glu Glu Thr

		115					120					125			
Lys	Lys	Val	Gln	Ala	Glu	Thr	Ala	Ser	Lys	Thr	Arg	Glu	Val	Gln	Ala
	130					135					140				
Gln	Leu	Leu	Gln	Glu	Lys	Arg	Leu	Leu	Glu	Lys	Gln	Leu	Ser	Glu	Pro
145					150					155					160
Asp	Arg	Arg	Leu	Leu	Gly	Lys	Arg	Lys	Arg	Arg	Glu	Leu	Asn	Met	Lys
				165					170					175	
Ala	Gln	Ala	Leu	Lys	Leu	Ala	Ala	Lys	Arg	Phe	Ile	Phe	Glu	Tyr	Ser
			180					185					190		
Cys	Gly	Ile	Asn	Arg	Glu	Asn	Gln	Gln	Phe	Lys	Lys	Glu	Leu	Leu	Gln
		195					200					205			
Leu	Ile	Glu	Gln	Ala	Gln	Lys	Leu	Thr	Ala	Thr	Gln	Ser	His	Leu	Glu
	210					215					220				
Asn	Arg	Lys	Gln	Gln	Leu	Gln	Gln	Glu	Gln	Trp	Tyr	Leu	Glu	Ser	Leu
225					230					235					240
Ile	Gln	Ala	Arg	Gln	Arg	Leu	Gln	Gly	Ser	His	Asn	Gln	Cys	Leu	Asn
				245					250					255	
Arg	Gln	Asp	Val	Pro	Lys	Thr	Thr	Pro	Ser	Leu	Pro	Gln	Gly	Thr	Lys
			260					265					270		
Ser	Arg	Ile	Asn	Pro	Lys										
		275													

<210> 3235

<211> 112

<212> PRT

<213> Homo sapiens

<400> 3235

Met Arg His Arg Ala Gln Gln Thr Gln Lys Phe Lys Ala Ala Tyr Ala 1 5 10 15 Tyr Asn Leu Met Gly Ser Leu Ser His Glu Phe Arg Tyr Ser Phe Val 25 20 30 Arg Val Leu Trp Phe Arg Ile Ser His Lys Ala Val Ile Lys Leu Leu 35 40 45 Ala Arg Thr Gly Val Ser Ser Glu Val Gln Met Glu Glu Asp Ser Leu 50 55 60 Leu Gln Arg Thr Asp Gly Gly Thr Gln Phe Leu Glu Val Gly Gln Thr 70 75 65 80 Ala Ala Ala Leu Cys Ser Leu Pro Cys Gly Pro Leu Arg Tyr Asp His 85 90 95 Leu Leu Cys Glu Ser Val Gln Ser Ser Arg Ala Thr Glu Arg Ala Cys 100 105 110

<210> 3236

<211> 655

<212> PRT

<213> Homo sapiens

<400> 3236

Met Pro Leu Lys Trp Lys Thr Ser Ser Pro Ala Ile Trp Arg Phe Pro

1 5 10 15

Val Pro Val Pro Lys Thr Ser Arg Ser Thr Pro Leu Ser Pro Ala Tyr
20 25 30

Ile Ser Leu Val Glu Glu Glu Asp Gln His Met Lys Leu Ser Leu Gly

35 40 45

Gly Ser Glu Met Gly Leu Ser Ser His Leu Gln Ser Ser Lys Ala Gly

	50					55					60					
Pro	Thr	Arg	Ile	Phe	Thr	Ser	Asn	Thr	His	Ser	Ser	Val	Val	Leu	Gln	
65					70					75					80	
Gly	Phe	Asp	Gln	Leu	Arg	Leu	Glu	Gly	Leu	Leu	Cys	Asp	Val	Thr	Leu	
				85					90					95		
Met	Pro	Gly	Asp	Thr	Asp	Asp	Ala	Phe	Pro	Val	His	Arg	Val	Met	Met	
			100					105					110			
Ala	Ser	Ala	Ser	Asp	Tyr	Phe	Lys	Ala	Met	Phe	Thr	Gly	Gly	Met	Lys	
		115					120					125				
Glu	Gln	Asp	Leu	Met	Cys	Ile	Lys	Leu	His	Gly	Val	Ser	Lys	Val	Gly	
	130					135					140					
Leu	Arg	Lys	Ile	Ile	Asp	Phe	Ile	Tyr	Thr	Ala	Lys	Leu	Ser	Leu	Asn	
145					150					155					160	
Met	Asp	Asn	Leu	Gln	Asp	Thr	Leu	Glu	Ala	Ala	Ser	Phe	Leu	Gln	Ile	
				165					170					175		
Leu	Pro	Val	Leu	Asp	Phe	Cys	Lys	Val	Phe	Leu	Ile	Ser	Gly	Val	Thr	
			180					185					190			
Leu	Asp	Asn	Cys	Val	Glu	Val	Gly	Arg	Ile	Ala	Asn	Thr	Tyr	Asn	Leu	
		195					200					205				
Thr	Glu	Val	Asp	Lys	Tyr	Val	Asn	Ser	Phe	Val	Leu	Lys	Asn	Phe	Pro	
	210					215					220					
Ala	Leu	Leu	Ser	Thr	Gly	Glu	Phe	Leu	Lys	Leu	Pro	Phe	Glu	Arg	Leu	
225					230					235					240	
Ala	Phe	Val	Leu	Ser	Ser	Asn	Ser	Leu	Lys	His	Cys	Thr	Glu		Glu	
				245					250					255		
Leu	Phe	Lys		Thr	Cys	Arg	Trp		Arg	Leu	Glu	Glu		Arg	Met	
			260					265					270			
Asp	Phe	Ala	Ala	Lys	Leu	Met	Lys	Asn	Ile	Arg	Phe	Pro	Leu	Met	Thr	
		275					280					285				

Pro	Gln	Glu	Leu	Ile	Asn	Tyr	Val	Gln	Thr	Val	Asp	Phe	Met	Arg	Thr
	290					295					300				
Asp	Asn	Thr	Cys	Val	Asn	Leu	Leu	Leu	Glu	Ala	Ser	Asn	Tyr	Gln	Met
305					310					315					320
Met	Pro	Tyr	Met	Gln	Pro	Val	Met	Gln	Ser	Asp	Arg	Thr	Ala	Ile	Arg
				325					330					335	
Ser	Asp	Thr	Thr	His	Leu	Val	Thr	Leu	Gly	Gly	Val	Leu	Arg	Gln	Arg
			340					345					350		
Leu	Val	Val	Ser	Lys	Glu	Leu	Arg	Met	Tyr	Asp	Glu	Lys	Ala	His	Glu
		355					360					365			•
Trp	Lys	Ser	Leu	Ala	Pro	Met	Asp	Ala	Pro	Arg	Tyr	Gln	His	Gly	Πe
	370					375					380				
Ala	Val	Ile	Gly	Asn	Phe	Leu	Tyr	Val	Val	Gly	Gly	Gln	Ser	Asn	Tyr
385					390					395					400
Asp	Thr	Lys	Gly	Lys	Thr	Ala	Val	Asp	Thr	Val	Phe	Arg	Phe	Asp	Pro
				405					410					415	
Arg	Tyr	Asn	Lys	Trp	Met	Gln	Val	Ala	Ser	Leu	Asn	Glu	Lys	Arg	Thr
			420					425					430		
Phe	Phe	His	Leu	Ser	Ala	Leu	Lys	Gly	Tyr	Leu	Tyr	Ala	Val	Gly	Gly
		435					440					445			
Arg	Asn	Ala	Ala	Gly	Glu	Leu	Pro	Thr	Val	Glu	Cys	Tyr	Asn	Pro	Arg
	450					455					460				
Thr	Asn	Glu	Trp	Thr	Tyr	Val	Ala	Lys	Met	Ser	Glu	Pro	His	Tyr	Gly
465					470					475					480
His	Ala	Gly	Thr	Val	Tyr	Gly	Gly	Val	Met	Tyr	Ile	Ser	Gly	Gly	Πe
				485					490					495	
Thr	His	Asp	Thr	Phe	Gln	Lys	Glu	Leu	Met	Cys	Phe	Asp	Pro	Asp	Thi
			500					505					510		
Asp	Lys	Trp	Ile	Gln	Lys	Ala	Pro	Met	Thr	Thr	Val	Arg	Gly	Leu	His

Cys Met Cys Thr Val Gly Glu Arg Leu Tyr Val Ile Gly Gly Asn His Phe Arg Gly Thr Ser Asp Tyr Asp Asp Val Leu Ser Cys Glu Tyr Tyr Ser Pro Ile Leu Asp Gln Trp Thr Pro Ile Ala Ala Met Leu Arg Gly Gln Ser Asp Val Gly Val Ala Val Phe Glu Asn Lys Ile Tyr Val Val Gly Gly Tyr Ser Trp Asn Asn Arg Cys Met Val Glu Ile Val Gln Lys Tyr Asp Pro Asp Lys Asp Glu Trp His Lys Val Phe Asp Leu Pro Glu Ser Leu Gly Gly Ile Arg Ala Cys Thr Leu Thr Val Phe Pro Pro Glu Glu Thr Thr Pro Ser Pro Ser Arg Glu Ser Pro Leu Ser Ala Pro

<210> 3237

<211> 608

<212> PRT

<213> Homo sapiens

<400> 3237

Met Leu Leu Glu Thr Gly Met Lys Glu Glu Gly Leu Phe Arg Ile

1 5 10 15

Gly Ala Gly Ala Ser Lys Leu Lys Lys Leu Lys Ala Ala Leu Asp Cys
20 25 30

Ser	Thr	Ser	His	Leu	Asp	Glu	Phe	Tyr	Ser	Asp	Pro	His	Ala	Val	Ala
		35					40					45			
Gly	Ala	Leu	Lys	Ser	Tyr	Leu	Arg	Glu	Leu	Pro	Glu	Pro	Leu	Met	Thr
	50					55					60				
Phe	Asn	Leu	Tyr	Glu	Glu	Trp	Thr	Gln	Val	Ala	Ser	Val	Gln	Asp	Gln
65					70					75					80
Asp	Lys	Lys	Leu	Gln	Asp	Leu	Trp	Arg	Thr	Cys	Gln	Lys	Leu	Pro	Pro
				85					90					95	
Gln	Asn	Phe	Val	Asn	Phe	Arg	Tyr	Leu	Ile	Lys	Phe	Leu	Ala	Lys	Leu
			100					105					110		
Ala	Gln	Thr	Ser	Asp	Val	Asn	Lys	Met	Thr	Pro	Ser	Asn	Ile	Ala	Ile
		115					120					125			
Val	Leu	Gly	Pro	Asn	Leu	Leu	Trp	Ala	Arg	Asn	Glu	Gly	Thr	Leu	Ala
	130					135					140				
Glu	Met	Ala	Ala	Ala	Thr	Ser	Val	His	Val	Val	Ala	Val	Ile	Glu	Pro
145					150					155					160
Ile	Ile	Gln	His	Ala	Asp	Trp	Phe	Phe	Pro	Glu	Glu	Val	Glu	Phe	Asn
				165					170					175	
Val	Ser	Glu	Ala	Phe	Val	Pro	Leu	Thr	Thr	Pro	Ser	Ser	Asn	His	Ser
			180					185					190		
Phe	His	Thr	Gly	Asn	Asp	Ser	Asp	Ser	Gly	Thr	Leu	Glu	Arg	Lys	Arg
		195					200					205			
Pro	Ala	Ser	Met	Ala	Val	Met	Glu	Gly	Asp	Leu	Val	Lys	Lys	Glu	Ser
	210					215					220				
Phe	Gly	Val	Lys	Leu	Met	Asp	Phe	Gln	Ala	His	Arg	Arg	Gly	Gly	Thr
225					230					235					240
Leu	Asn	Arg	Lys	His	Ile	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro
				245					250					255	
Thr	Asp	Glv	Ser	Thr	Val	Val	Pro	Ala	Glv	Pro	Glu	Pro	Pro	Pro	Gln

			260					265					270		
Ser	Ser	Arg	Ala	Glu	Ser	Ser	Ser	Gly	Gly	Gly	Thr	Val	Pro	Ser	Ser
		275					280					285			
Ala	Gly	Ile	Leu	Glu	Gln	Gly	Pro	Ser	Pro	Gly	Asp	Gly	Cys	Pro	Pro
	290					295					300				
Lys	Pro	Lys	Asp	Pro	Val	Ser	Ala	Ala	Val	Pro	Ala	Pro	Gly	Arg	Asn
305					310					315					320
Asn	Ser	Gln	Ile	Ala	Ser	Gly	Gln	Asn	Gln	Pro	Gln	Ala	Ala	Ala	Gly
				325					330					335	
Ser	His	Gln	Leu	Ser	Met	Gly	Gln	Pro	His	Asn	Ala	Ala	Gly	Pro	Ser
			340					345					350		
Pro	His	Thr	Leu	Arg	Arg	Ala	Val	Lys	Lys	Pro	Ala	Pro	Ala	Pro	Pro
		355					360					365			
Lys	Pro	Gly	Asn	Pro	Pro	Pro	Gly	His	Pro	Gly	Gly	Gln	Ser	Ser	Ser
	370					375					380				
Gly	Thr	Ser	Gln	His	Pro	Pro	Ser	Leu	Ser	Pro	Lys	Pro	Pro	Thr	Arg
385					390					395					400
Ser	Pro	Ser	Pro	Pro	Thr	Gln	His	Thr	Gly	Gln	Pro	Pro	Gly	Gln	Pro
				405					410					415	
Ser	Ala	Pro	Ser	Gln	Leu	Ser	Ala	Pro	Arg	Arg	Tyr	Ser	Ser	Ser	Leu
			420					425					430		
Ser	Pro	Ile	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln
		435					440					445			
Ala	Thr	Pro	Leu	Met	His	Thr	Lys	Pro	Asn	Ser	Gln	Gly	Pro	Pro	Asn
	450					455					460				
Pro	Met	Ala	Leu	Pro	Ser	Glu	His	Gly	Leu	Glu	Gln	Pro	Ser	His	Thr
465		٠			470					475					480
Pro	Pro	Gln	Thr	Pro	Thr	Pro	Pro	Ser	Thr	Pro	Pro	Leu	Gly	Lys	Gln
				485					490					495	

Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala Gly Gly Asn Pro Glu 505 510 500 Thr Ala Gln Pro His Ala Gly Thr Leu Pro Arg Pro Arg Pro Val Pro 520 525 515 Lys Pro Arg Asn Arg Pro Ser Val Pro Pro Pro Pro Gln Pro Pro Gly 535 540 530 Val His Ser Ala Gly Asp Ser Ser Leu Thr Asn Thr Ala Pro Thr Ala 560 550 555 545 Ser Lys Ile Val Thr Asp Ser Asn Ser Arg Val Ser Glu Pro His Arg 570 575 565 Ser Ile Phe Pro Glu Met His Ser Asp Ser Ala Ser Lys Asp Val Pro 590 580 585 Gly Arg Ile Leu Leu Asp Ile Asp Asn Asp Thr Glu Ser Thr Ala Leu 595 600 605

<210> 3238

<211> 510

<212> PRT

<213> Homo sapiens

<400> 3238

Met Val Ala Arg Val Gly Leu Leu Leu Arg Ala Leu Gln Leu Leu Leu 1 5 10 15

Trp Gly His Leu Asp Ala Gln Pro Ala Glu Arg Gly Gly Gln Glu Leu 20 25 30

Arg Lys Glu Ala Glu Ala Phe Leu Glu Lys Tyr Gly Tyr Leu Asn Glu
35 40 45

Gln Val Pro Lys Ala Pro Thr Ser Thr Arg Phe Ser Asp Ala Ile Arg

	50					55					60				
Ala	Phe	Gln	Trp	Val	Ser	Gln	Leu	Pro	Val	Ser	Gly	Val	Leu	Asp	Arg
65					70					75					80
Ala	Thr	Leu	Arg	Gln	Met	Thr	Arg	Pro	Arg	Cys	Gly	Val	Thr	Asp	Thr
				85					90					95	
Asn	Ser	Tyr	Ala	Ala	Trp	Ala	Glu	Arg	Ile	Ser	Asp	Leu	Phe	Ala	Arg
			100					105				•	110		
His	Arg	Thr	Lys	Met	Arg	Arg	Lys	Lys	Arg	Phe	Ala	Lys	Gln	Gly	Asn
		115					120					125			
Lys	Trp	Tyr	Lys	Gln	His	Leu	Ser	Tyr	Arg	Leu	Val	Asn	Trp	Pro	Glu
	130					135					140				
His	Leu	Pro	Glu	Pro	Ala	Val	Arg	Gly	Ala	Val	Arg	Ala	Ala	Phe	Gln
145					150					155					160
Leu	Trp	Ser	Asn	Val	Ser	Ala	Leu	Glu	Phe	Trp	Glu	Ala	Pro	Ala	Thr
				165					170					175	
Gly	Pro	Ala	Asp	Ile	Arg	Leu	Thr	Phe	Phe	Gln	Gly	Asp	His	Asn	Asp
			180					185					190		
Gly	Leu	Gly	Asn	Ala	Phe	Asp	Gly	Pro	Gly	Gly	Ala	Leu	Ala	His	Ala
		195					200					205			
Phe	Leu	Pro	Arg	Arg	Gly	Glu	Ala	His	Phe	Asp	Gln	Asp	Glu	Arg	Trp
	210					215					220				
Ser	Leu	Ser	Arg	Arg	Arg	Gly	Arg	Asn	Leu	Phe	Val	Val	Leu	Ala	His
225					230					235					240
Glu	Ile	Gly	His	Thr	Leu	Gly	Leu	Thr	His	Ser	Pro	Ala	Pro	Arg	Ala
				245					250					255	
Leu	Met	Ala	Pro	Tyr	Tyr	Lys	Arg	Leu	Gly	Arg	Asp	Ala	Leu	Leu	Ser
			260					265					270		
Trp	Asp	Asp	Val	Leu	Ala	Val	Gln	Ser	Leu	Tyr	Gly	Lys	Pro	Leu	Gly
		275					280					285			

Gly	Ser	Val	Ala	Val	Gln	Leu	Pro	Gly	Lys	Leu	Phe	Thr	Asp	Phe	Glu
	290					295					300				
Thr	Trp	Asp	Ser	Tyr	Ser	Pro	Gln	Gly	Arg	Arg	Pro	Glu	Thr	Gln	Gly
305					310					315					320
Pro	Lys	Tyr	Cys	His	Ser	Ser	Phe	Asp	Ala	Ile	Thr	Val	Gly	Ser	His
				325					330					335	
Phe	Trp	Glu	Val	Ala	Ala	Asp	Gly	Asn	Val	Ser	Glu	Pro	Arg	Pro	Leu
			340					345					350		
Gln	Glu	Arg	Trp	Val	Gly	Leu	Pro	Pro	Asn	Ile	Glu	Ala	Ala	Ala	Val
		355					360					365			
Ser	Leu	Asn	Asp	Gly	Asp	Phe	Tyr	Phe	Phe	Lys	Gly	Gly	Arg	Cys	Trp
	370					375					380				
Arg	Phe	Arg	Gly	Pro	Lys	Pro	Val	Trp	Gly	Leu	Pro	Gln	Leu	Cys	Arg
385					390					395					400
Ala	Gly	Gly	Leu	Pro	Arg	His	Pro	Asp	Ala	Ala	Leu	Phe	Phe	Pro	Pro
				405					410					415	
Leu	Arg	Arg	Leu	Ile	Leu	Phe	Lys	Gly	Ala	Arg	Tyr	Tyr	Val	Leu	Ala
			420					425					430		
Arg	Gly	Gly	Leu	Gln	Val	Glu	Pro	Tyr	Tyr	Pro	Arg	Ser	Leu	Gln	Asp
		435					440					445			
Trp	Gly	Gly	Ile	Pro	Glu	Glu	Val	Ser	Gly	Ala	Leu	Pro	Arg	Pro	Asp
	450					455					460				
Gly	Ser	Ile	Ile	Phe	Phe	Arg	Asp	Asp	Arg	Tyr	Trp	Arg	Leu	Asp	Gln
465					470					475					480
Ala	Lys	Leu	Gln	Ala	Thr	Thr	Ser	Gly	Arg	Trp	Ala	Thr	Glu	Leu	Pro
				485					490					495	
Trp	Met	Gly	Cys	Trp	His	Ala	Asn	Ser	Gly	Ser	Ala	Leu	Phe		
			500					505					510		

<210> 3239

<211> 248

<212> PRT

<213> Homo sapiens

<400> 3239

Met Pro Arg Ile Ala Gly Asn His Leu Met Leu Glu Glu Ser Arg Thr

1 5 10 15

Cys Ser Ser Pro Glu Leu Leu Asp Gly Val Trp Pro Cys Gln Pro Leu 20 25 30

His Phe Gly Leu Pro Ala Ser Glu Met His Phe Gln Thr Met Leu Lys
35 40 45

Ser Lys Leu Asn Val Leu Thr Leu Lys Lys Glu Pro Leu Pro Ala Val
50 55 60

Ile Phe His Glu Pro Glu Ala Ile Glu Leu Cys Thr Thr Thr Pro Leu 65 70 75 80

Met Lys Thr Arg Thr His Ser Gly Cys Lys Val Thr Tyr Leu Gly Lys
85 90 95

Val Ser Thr Thr Gly Met Gln Phe Leu Ser Gly Cys Thr Glu Lys Pro 100 105 110

Val Ile Glu Leu Trp Lys Lys His Thr Leu Ala Arg Glu Asp Val Phe 115 120 125

Pro Ala Asn Ala Leu Leu Glu Ile Arg Pro Phe Gln Val Trp Leu His 130 135 140

His Leu Asp His Lys Gly Glu Ala Thr Val His Met Asp Thr Phe Gln 145 150 155 160

Val Ala Arg Ile Ala Tyr Cys Thr Ala Asp His Asn Val Ser Pro Asn 165 170 175 Ile Phe Ala Trp Val Tyr Arg Glu Ile Asn Asp Asp Leu Ser Tyr Gln 180 190 185 Met Asp Cys His Ala Val Glu Cys Glu Ser Lys Leu Glu Ala Lys Lys 200 205 195 Leu Ala His Ala Met Met Glu Ala Phe Arg Lys Thr Phe His Ser Met 210 215 220 Lys Ser Asp Gly Arg Ile His Ser Asn Ser Ser Ser Glu Glu Val Ser 230 225 235 240 Gln Glu Leu Glu Ser Asp Asp Gly

in ora zea ora ber nop .

245

<210> 3240

<211> 588

<212> PRT

<213> Homo sapiens

<400> 3240

Met Asp Thr Asn Asp Asp Pro Asp Glu Asp His Leu Thr Ser Tyr Asp

1 5 10 15

Ile Gln Leu Ser Ile Gln Glu Ser Ile Glu Ala Ser Lys Thr Ala Leu 20 25 30

Cys Pro Glu Arg Phe Val Pro Leu Ser Ala Gln Asn Arg Lys Leu Val
35 40 45

Glu Ala Ile Lys Gln Gly His Ile Leu Glu Leu Gln Glu Tyr Val Lys
50 55 60

Tyr Lys Tyr Ala Met Asp Glu Ala Asp Glu Lys Gly Trp Phe Pro Leu 65 70 75 80

His Glu Ala Val Val Gln Pro Ile Gln Gln Ile Leu Glu Ile Val Leu

				85					90					95	
Asp	Ala	Ser	Tyr	Lys	Thr	Leu	Trp	Glu	Phe	Lys	Thr	Cys	Asp	Gly	Glu
			100					105					110		
Thr	Pro	Leu	Thr	Leu	Ala	Val	Lys	Ala	Gly	Leu	Val	Glu	Asn	Val	Arg
		115					120					125			
Thr	Leu	Leu	Glu	Lys	Gly	Val	Trp	Pro	Asn	Thr	Lys	Asn	Asp	Lys	Gly
	130					135					140				
Glu	Thr	Pro	Leu	Leu	Ile	Ala	Val	Lys	Lys	Gly	Ser	Tyr	Asp	Met	Val
145					150					155					160
Ser	Thr	Leu	Ile	Lys	His	Asn	Thr	Ser	Leu	Asp	Gln	Pro	Cys	Val	Lys
				165					170					175	
Arg	Trp	Ser	Ala	Met	His	Glu	Ala	Ala	Lys	Gln	Gly	Arg	Lys	Asp	Ile
			180					185					190		
Val	Ala	Leu	Leu	Leu	Lys	His	Gly	Gly	Asn	Val	His	Leu	Arg	Asp	Gly
		195					200					205			
Phe	Gly	Val	Thr	Pro	Leu	Gly	Val	Ala	Ala	Glu	Tyr	Gly	His	Cys	Asp
	210					215					220				
Val	Leu	Glu	His	Leu	Ile	His	Lys	Gly	Gly	Asp	Val	Leu	Ala	Leu	Ala
225					230					235					240
Asp	Asp	Gly	Ala	Ser	Val	Leu	Phe	Glu	Ala	Ala	Gly	Gly	Gly	Asn	Pro
				245					250					255	
Asp	Cys	Ile	Ser	Leu	Leu	Leu	Glu	Tyr	Gly	Gly	Ser	Gly	Asn	Val	Pro
			260					265					270		
Asn	Arg	Ala	Gly	His	Leu	Pro	Ile	His	Arg	Ala	Ala	Tyr	Glu	Gly	His
		275					280					285			
Tyr	Leu	Ala	Leu	Lys	Tyr	Leu	Ile	Pro	Val	Thr	Ser	Lys	Asn	Ala	Ile
	290					295					300				
Arg	Lys	Ser	Gly	Leu	Thr	Pro	Ile	His	Ser	Ala	Ala	Asp	Gly	Gln	Asn
305					310					315					320

Ala	Gln	Cys	Leu	Glu	Leu	Leu	Ile	Glu	Asn	Gly	Phe	Asp	Val	Asn	Thr
				325					330					335	
Leu	Leu	Ala	Asp	His	Ile	Ser	Gln	Ser	Cys	Asp	Asp	Glu	Arg	Lys	Thr
			340					345					350		
Ala	Leu	Tyr	Phe	Ala	Val	Ser	Asn	Asn	Asp	Val	His	Cys	Thr	Glu	Val
		355					360					365			
Leu	Leu	Ala	Ala	Gly	Ala	Asp	Pro	Asn	Leu	Asp	Pro	Leu	Asn	Cys	Leu
	370					375					380				
Leu	Val	Ala	Val	Arg	Ala	Asn	Asn	Tyr	Glu	Ile	Val	Arg	Leu	Leu	Leu
385					390					395					400
Ser	His	Gly	Ala	Asn	Val	Asn	Cys	Tyr	Phe	Met	His	Val	Asn	Asp	Thr
				405					410					415	
Arg	Phe	Pro	Ser	Val	Ile	Gln	Tyr	Ala	Leu	Asn	Asp	Glu	Val	Met	Leu
			420					425					430	•	
Arg	Leu	Leu	Leu	Asn	Asn	Gly	Tyr	Gln	Val	Glu	Met	Cys	Phe	Asp	Cys
		435					440					445			
Met	His	Gly	Asp	Ile	Phe	Gly	Asn	Ser	Phe	Val	Trp	Ser	Glu	Ile	Gln
	450					455					460				
Glu	Glu	Val	Leu	Pro	Gly	Trp	Thr	Ser	Cys	Val	Ile	Lys	Asp	Asn	Pro
465					470					475					480
Phe	Cys	Glu	Phe	Ile	Thr	Val	Pro	Trp	Met	Lys	His	Leu	Val	Gly	Arg
				485					490					495	
Val	Thr	Arg	Val	Leu	Ile	Asp	Tyr	Met	Asp	Tyr	Val	Pro	Leu	Cys	Ala
			500					505					510		
Lys	Leu	Lys	Ser	Ala	Leu	Glu	Val	Gln	Arg	Glu	Trp	Pro	Glu	Ile	Arg
		515					520					525			
Gln	Ile	Leu	Glu	Asn	Pro	Cys	Ser	Leu	Lys	His	Leu	Cys	Arg	Leu	Lys
	530					535					540				
Πρ	Ara	Ara	Len	Met	G137	I AII	Gle	Lvc	I Au	Cvc	Gln	Pro	Δla	Sar	Val

545 550 555 560

Glu Lys Leu Pro Leu Pro Pro Ala Ile Gln Arg Tyr Ile Leu Phe Lys
565 570 575

Glu Tyr Asp Leu Tyr Gly Gln Glu Leu Lys Leu Thr
580 585

<210> 3241

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3241

Met Gln Gly Leu Ser Val Cys Leu Ser Phe Ser Leu Arg Asn Glu Asn
1 5 10 15

Pro Asp Leu Arg Ala Val Gln Leu Arg Ala His Tyr Leu Pro Ser Pro
20 25 30

Ser Arg Pro Gln Pro His His Pro Thr Cys Pro Leu Pro Pro Thr Ser 35 40 45

Ser Gly Ala Phe Ser Arg Cys Leu Met Val Gly Gly Phe Leu Met Gly 50 55 60

Gln Glu Arg Arg Ala Ser Ser Cys Asp Ser Thr Val Trp Val Lys Cys
65 70 75 80

Pro Val Arg Ala Trp Cys Gly Glu Leu Ala Ser Glu Glu Pro Leu Val 85 90 95

Gly Lys Arg Glu Val Gly

100

<210> 3242

<211> 192

<212> PRT

<213> Homo sapiens

<400> 3242

Met Glu Arg Gln Pro Gly Pro Val Arg Gly Lys Leu Gln Ile Phe Gln

1 5 10 15

Lys Thr Glu Lys Asp Pro Gln Ala Arg Ala Gly Ser Pro Val Gln Glu
20 25 30

Tyr His Thr Ala Leu Val Ala Gly Asp Leu Asp His Leu Lys Pro Leu
35 40 45

Met Asp Gln Phe Phe Gln Asp Ala Asn Val Val Phe Glu Ile Asn Lys
50 55 60

Asp Glu Met Glu Trp Gln Val Lys Ser Pro Ala Thr Phe Gly Leu Ser
65 70 75 80

Gly Leu Trp Thr Leu Glu Tyr Lys Arg Glu Leu Thr Thr Pro Leu Cys

85 90 95

Ile Ala Ala His Gly His Thr Ala Cys Val Arg His Leu Leu Gly
100 105 110

Arg Gly Ala Asp Pro Asp Ala Ser Pro Ala Gly Pro Arg Val Pro Asp 115 120 125

Arg Ile Leu Arg Ser Pro Gly Leu Thr Ala Ala His Gly Ala Gly Ala
130 135 140

Ala Gln Pro Arg Leu Ser His Arg Val Ala Arg Arg Leu Pro Gln Gly
145 150 155 160

Ala Glu Asp Leu Cys Ile Cys Pro Arg Ser His Arg Gly Ala Phe Gln 165 170 175

Leu Leu Pro Ser Ala Leu Leu Val Arg Val Leu Glu Gly Ser Asp Ser

180 185 190

<210> 3243

<211> 315

<212> PRT

<213> Homo sapiens

<400> 3243

Met Met Ser Ser Val Ser Thr Glu Ser Lys Leu Gln Gln Ala Val Ser

1 5 10 15

Leu Gln Gly Val Asp Pro Glu Thr Cys Met Ile Val Phe Lys Asn His

20 25 30

Trp Ala Gln Val Val Lys Ile Leu Glu Lys His Asp Pro Leu Lys Asn

35 40 45

Thr Gln Ala Lys Tyr Gly Ser Ile Pro Pro Asp Glu Ala Ser Ala Val

50 55 60

Gln Asn Tyr Val Glu His Met Leu Phe Leu Leu Ile Glu Glu Gln Ala

65 70 75 80

Lys Asp Ala Ala Met Gly Pro Ile Leu Glu Phe Val Val Ser Glu Asn

85 90 95

Ile Met Glu Lys Leu Phe Leu Trp Ser Leu Arg Arg Glu Phe Thr Asp

100 105 110

Glu Thr Lys Ile Glu Gln Leu Lys Met Tyr Glu Met Leu Val Thr Gln

115 120 125

Ser His Gln Pro Leu Leu His His Lys Pro Ile Leu Lys Pro Leu Met

130 135 140

Met Leu Leu Ser Ser Cys Ser Gly Thr Thr Thr Pro Thr Val Glu Glu

145 150 155 160

Lys Leu Val Val Leu Leu Asn Gln Leu Cys Ser Ile Leu Ala Lys Asp Pro Ser Ile Leu Glu Leu Phe Phe His Thr Ser Glu Asp Gln Gly Ala Ala Asn Phe Leu Ile Phe Ser Leu Leu Ile Pro Phe Ile His Arg Glu Gly Ser Val Gly Gln Gln Ala Arg Asp Ala Leu Leu Phe Ile Met Ser Leu Ser Ala Glu Asn Thr Met Val Ala His His Ile Val Glu Asn Thr Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Gly Leu Tyr Ser Ser Leu Pro Thr Lys Leu Glu Asp Glu Glu Asp Asp Phe Asp Ser Phe Ile Ala Glu Met Pro Ala Val Glu Thr Val Pro Ser Pro Phe Val Gly Arg Asp Glu Ala Ala Phe Ala Ser Arg His Pro Val Arg Thr Gln Ser Thr Pro Phe Thr Gly Pro Phe Ile Ser Val Val Leu

<210> 3244

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3244

Met Leu Asp Gly Leu Gln Arg Leu Arg Ser Gln Pro Lys Leu Ala Asp

1				5					10					15	
Val	Thr	Leu	Leu	Val	Gly	Gly	Arg	Glu	Leu	Pro	Cys	His	Arg	Gly	Leu
			20					25					30		
Leu	Ala	Leu	Ser	Ser	Pro	Tyr	Phe	His	Ala	Met	Phe	Ala	Gly	Asp	Phe
		35					40					45			
Ala	Glu	Ser	Phe	Ser	Ala	Arg	Val	Glu	Leu	Arg	Asp	Val	Glu	Pro	Ala
	50					55					60				
Val	Val	Gly	Gln	Leu	Val	Asp	Phe	Val	Tyr	Thr	Gly	Arg	Leu	Thr	Ile
65					70					75					80
Thr	Gln	Gly	Asn	Val	Glu	Ala	Leu	Thr	Arg	Thr	Ala	Ala	Arg	Leu	His
				85					90					95	
Phe	Pro	Ser	Val	Gln	Lys	Val	Cys	Gly	Arg	Tyr	Leu	Gln	Gln	Gln	Leu
			100					105					110		
Asp	Ala	Ala	Asn	Cys	Leu	Gly	Ile	Cys	Glu	Phe	Gly	Glu	Gln	Gln	Gly
		115					120					125			
Leu	Leu	Gly	Val	Ala	Ala	Lys	Ala	Trp	Ala	Phe	Leu	Arg	Glu	Asn	Phe
	130					135					140				
Glu	Ala	Val	Ala	Arg	Glu	Asp	Glu	Phe	Leu	Gln	Leu	Pro	Arg	Glu	Arg
145					150					155					160
Leu	Val	Thr	Cys	Leu	Ala	Gly	Asp	Leu	Leu	Gln	Val	Gln	Pro	Glu	Gln
				165					170					175	
Gly	Arg	Leu	Glu	Ala	Leu	Met	Arg	Trp	Val	Arg	His	Asp	Pro	Gln	Ala
			180					185					190		
Arg	Ala	Val	His	Leu	Pro	Glu	Leu	Leu	Ser	Leu	Val	His	Leu	Asp	Ala
		195					200					205			
Val	Pro	Arg	Pro	Cys	Val	Gln	Gln	Leu	Leu	Ala	Ser	Glu	Pro	Leu	Ile
	210					215					220				
Gln	Glu	Ser	Glu	Ala	Cys	Arg	Ala	Ala	Leu	Ser	Gln	Gly	His	Asp	Gly
225					230					235					240

Ala Pro Leu Ala Leu Gln Gln Lys Leu Glu Glu Val Leu Val Val Val

245

Gly Gly Gln Ala Leu Glu Glu Glu Glu Ala Gly Glu Glu Pro Thr Pro

260

Cly Leu Gly Asn Phe Ala Phe Tyr Asn Ser Lys Ala Lys Arg Trp Met

275

Ala Leu Pro Asp Phe Pro Asp Tyr His Lys

290

295

<210> 3245

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3245

Met Cys Arg Cys Arg Arg Tyr Arg Arg Arg Gly Arg Val Trp Gly Gly

1 5 10 15

Ala Gly Asp Ser Arg Ala Ala Gly Asn Arg Ser Gly Ser Gly Ala Ala
20 25 30

Pro Gly Leu Arg Trp Gly Gly Val Arg His Trp Pro His Leu Val Ile
35 40 45

Pro Ala Ala His Arg Pro Gln Phe Pro Arg Leu Leu Asn Gly Tyr Ala 50 55 60

Gly Gly Ala Thr Gly Trp Ile Trp Ile Arg Ile Arg Gly Ile Gly Ile
65 70 75 80

Gly Ala Ser Cys Val Leu Gly Val Ser Cys Asn Leu Glu Leu Gly Val
85 90 95

Ala Arg Phe Val Pro Gln Phe Pro Cys Ile Val Gly Asp Gly Ala

100 105 110

<210> 3246

<211> 676

<212> PRT

<213> Homo sapiens

<400> 3246

Met Glu Pro Arg Gly Gly Gly Ser Ser Gln Phe Ser Ser Cys Pro Gly

1 5 10 15

Pro Ala Ser Ser Gly Asp Gln Met Gln Arg Leu Leu Gln Gly Pro Ala

20 25 30

Pro Arg Pro Pro Gly Glu Pro Pro Gly Ser Pro Lys Ser Pro Gly His

35 40 45

Ser Thr Gly Ser Gln Arg Pro Pro Asp Ser Pro Gly Ala Pro Pro Arg

50 55 60

Ser Pro Ser Arg Lys Lys Arg Arg Ala Val Gly Ala Lys Gly Gly

65 70 75 80

His Thr Gly Ala Ser Ala Ser Ala Gln Thr Gly Ser Pro Leu Leu Pro

85 90 95

Ala Ala Ser Pro Glu Thr Ala Lys Leu Met Ala Lys Ala Gly Gln Glu

100 105 110

Glu Leu Gly Pro Gly Pro Ala Gly Ala Pro Glu Pro Gly Pro Arg Ser

115 120 125

Pro Val Gln Glu Asp Arg Pro Gly Pro Gly Leu Gly Leu Ser Thr Pro

130 135 140

Val Pro Val Thr Glu Gln Gly Thr Asp Gln Ile Arg Thr Pro Arg Arg

145 150 155 160

Ala	Lys	Leu	His	Thr	Val	Ser	Thr	Thr	Val	Trp	Glu	Ala	Leu	Pro	Asp
				165					170					175	
Val	Ser	Arg	Ala	Lys	Ser	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu
			180					185					190		
Pro	Gln	Pro	Asp	Arg	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro
		195					200					205			
Gln	Ser	Asp	Arg	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln
	210					215					220				
Pro	Asp	Thr	Asp	Met	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln	Pro
225					230					235					240
Asp	Arg	Asp	Met	Ala	Val	Ser	Ile	Pro	Ala	Ser	Lys	Pro	Gln	Ser	Asp
				245					250					255	
Thr	Ala	Val	Ser	Thr	Pro	Ala	Ser	Glu	Pro	Gln	Ser	Ser	Val	Ala	Leu
			260					265					270		
Ser	Thr	Pro	Ile	Ser	Lys	Pro	Gln	Leu	Asp	Thr	Asp	Val	Ala	Val	Ser
		275					280					285			
Thr	Pro	Ala	Ser	Lys	His	Gly	Leu	Asp	Val	Ala	Leu	Pro	Thr	Ala	Gly
	290	-				295					300				
Pro	Val	Ala	Lys	Leu	Glu	Val	Ala	Ser	Ser	Pro	Pro	Val	Ser	Glu	Ala
305					310					315					320
Val	Pro	Arg	Met	Thr	Glu	Ser	Ser	Gly	Leu	'Val	Ser	Thr	Pro	Val	Pro
				325					330					335	
Arg	Ala	Asp	Ala	Ala	Gly	Leu	Ala	Trp	Pro	Pro	Thr	Arg	Arg	Ala	Gly
			340					345					350		
Pro	Asp	Val	Val	Glu	Met	Glu	Ala	Val	Val	Ser	Glu	Pro	Ser	Ala	Gly
		355					360					365			
Ala	Pro	Gly	Cys	Cys	Ser	Gly	Ala	Pro	Ala	Leu	Gly	Leu	Thr	Gln	Val
	370					375					380				
Pro	Arg	Lys	Lys	Lvs	Val	Arg	Phe	Ser	Val	Ala	Gly	Pro	Glv	Pro	Asr

385					390					395					400	
Lys	Pro	Gly	Ser	Gly	Gln	Ala	Ser	Ala	Arg	Pro	Ser	Ala	Leu	Gln	Thr	
				405					410					415		
Ala	Thr	Gly	Ala	His	Gly	Gly	Pro	Gly	Ala	Trp	Glu	Ala	Val	Ala	Val	
			420					425					430			
Gly	Pro	Arg	Pro	His	Gln	Pro	Arg	Ile	Leu	Lys	His	Leu	Pro	Arg	Pro	
		435					440					445				
Pro	Pro	Ser	Ala	Val	Thr	Arg	Val	Gly	Pro	Gly	Ser	Ser	Phe	Ala	Val	
	450					455					460					
Thr	Leu	Pro	Glu	Ala	Tyr	Glu	Phe	Phe	Phe	Cys	Asp	Thr	Ile	Glu	Glu	
465					470					475					480	
Asn	Glu	Glu	Ala	Glu	Ala	Ala	Ala	Ala	Gly	Gln	Asp	Pro	Ala	Gly	Val	
				485					490					495		
Gln	Trp	Pro	Asp	Ile	Cys	Glu	Phe	Phe	Phe	Pro	Asp	Val	Gly	Ala	Gln	
			500					505					510			
Arg	Ser	Arg	Arg	Arg	Gly	Ser	Pro	Glu	Pro	Leu	Pro	Arg	Ala	Asp	Pro	
		515					520					525				
Val	Pro	Ala	Pro	Ile	Pro	Gly	Asp	Pro	Val	Pro	Ile	Ser	Ile	Pro	Glu	
	530					535					540					
Val	Tyr	Glu	His	Phe	Phe	Phe	Gly	Glu	Asp	Arg	Leu	Glu	Gly	Val	Leu	
545					550					555					560	
Gly	Pro	Ala	Val	Pro	Leu	Pro	Leu	Gln	Ala	Leu	Glu	Pro	Pro	Arg	Ser	
				565					570					575		
Ala	Ser	Glu	Gly	Ala	Gly	Pro	Gly	Thr	Pro	Leu	Lys	Pro	Ala	Val	Val	
			580					585					590			
Glu	Arg	Leu	His	Leu	Ala	Leu	Arg	Arg	Ala	Gly	Glu	Leu	Arg	Gly	Pro	
		595					600					605				
Val	Pro	Ser	Ser	Ala	Phe	Ser	Gln	Asn	Asp	Met	Cys	Leu	Val	Phe	Val	
	610					615					620					

 Ala Phe Ala Thr Trp Ala Val Arg Thr Ser Asp Pro His Thr Pro Asp

 625
 630
 635
 640

 Ala Trp Lys Thr Ala Leu Leu Ala Asn Val Gly Thr Ile Ser Ala Ile
 645
 650
 655

 Arg Tyr Phe Arg Arg Gln Val Gly Gln Gly Arg Arg Ser His Ser Pro
 660
 665
 670

 Ser Pro Ser Ser
 675
 675

<210> 3247 <211> 103 <212> PRT <213> Homo sapiens

<400> 3247

Met Ser Ser Asn Gln Cys Pro Gly Val His Gly Ser Ser Leu Ala Tyr

1 5 10 15

Cys Ser Gly Leu His Ser Leu Gly His Cys Cys Leu Cys Arg Tyr Lys

20 25 30

Lys Lys Lys Glu Lys Gln Lys Lys Glu Gly Thr Ala Ala Ser Gln
35 40 45

Asn Val Asn Gln Asn Ile Ser Leu Trp Tyr Trp Glu Arg Lys Arg Arg
50 55 60

Phe Pro Arg Glu Asp Glu Asp Gln Thr Asp Cys Arg Pro Ala Ile Ser 65 70 75 80

Leu His Cys Thr Trp Ile Glý His Leu Leu Tyr Ala Pro Gly Lys Lys

85 90 95

Ile Gln Arg Thr Met Leu Leu

100

<210> 3248

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3248

Met Ala Asp His Asn Pro Asp Ser Asp Ser Thr Pro Arg Thr Leu Leu

1 5 10 15

Arg Arg Val Leu Asp Thr Ala Asp Pro Arg Thr Pro Arg Arg Pro Arg

20 25 30

Ser Ala Arg Ala Gly Ala Arg Arg Ala Leu Leu Glu Thr Ala Ser Pro

35 40 45

Arg Lys Leu Ser Gly Gln Thr Arg Thr Ile Ala Arg Gly Arg Ser His

50 55 60

Gly Ala Arg Val Ser Thr Gln Pro Thr Asp Pro Lys Gly Pro Trp Leu

65 70 75 80

Pro Arg Gly Gly Leu Arg Ser Ser Ser Ala Leu Glu Pro Thr Leu

85 90 95

Arg Lys Ser Gln Gly Arg Arg Thr Asp Trp Leu Leu Gly Ala Leu Pro

100 105 110

Ile Val Cys Trp Gln Ile Gly Pro Tyr Ser Gly Gln Trp Ala Leu Gly

115 120 125

Gly Thr Asp Thr Ser Asp Ala Ala Glu Glu His Pro Thr Asn Trp

130 135 140

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3249

Met Lys Glu Lys Ile Leu Arg Ala Ala Arg Glu Lys Gly Arg Ala Thr

1 5 10 15

His Lys Gly Lys Pro Ile Ser Leu Thr Ala Asp Leu Ser Thr Glu Thr

20 25 30

Leu Gln Ala Arg Arg Glu Trp Gly Pro Ile Phe Asn Ile Leu Lys Glu

35 40 45

Lys Asn Phe Gln Pro Arg Ile Ser Tyr Pro Ala Lys Leu Ser Phe Ile

50 55 60

Ser Glu Gly Glu Ile Lys Ser Phe Thr Asp Lys Arg Ile Leu Arg Asp

65 70 75 80

Phe Val Thr Thr Arg Pro Ala Leu Gln Gly Leu Leu Lys Glu Ala Leu

85 90 95

Asn Met Glu Arg Lys Asn Trp

100

<210> 3250

<211> 367

<212> PRT

<213> Homo sapiens

<400> 3250

Met Arg Gln Lys Ile Lys Glu Val Glu Glu Lys Gln Pro Glu Val Lys

Thr Gly Phe Ile Ala Ser Phe Leu Asp Phe Leu Lys Ser Gly Pro Lys Gln Gln Phe Ser Thr Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met Val Cys Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Ser Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Asp Lys Lys Lys Lys Thr Glu Ala Leu Gln Val Ala Thr Thr Ser Pro Thr Ala Asn Thr Thr Gly Thr Ala Thr Thr Ser Ser Thr Thr Val Gly Ala Val Lys Gln Glu Pro Leu His Ser Thr Ser Tyr Ala Val Asn Ile Leu Glu Asn Ile Ser Ser Ser Glu Ser Ser Lys Pro Ile Glu Leu Asp Gly Leu Pro Ser Asp Gln Phe Ala Lys Gly Gln Asp Thr Val Ala Ile Glu Gly Phe Thr Asp Glu Glu Asp Thr Glu Ser Gly Gly Glu Gly Gln Tyr Arg Glu Arg Asp Glu Phe Val Val Lys Ile Glu Asp Ile Glu Thr Phe Lys Glu Ala Leu Lys Thr Gly Lys Glu Pro Pro Ala Ile Trp Lys Val 245 250 255 Gln Lys Ala Leu Leu Gln Lys Phe Val Pro Val Ile Arg Asp Gly Gln 270 265 260 Arg Glu Phe Ala Ala Thr Asn Ser Tyr Leu Gly Tyr Phe Gly Asp Ala 280 285 275 Lys Ser Lys Tyr Lys Arg Ile Tyr Val Lys Phe Ile Glu Asn Ala Asn 295 300 290 Lys Lys Glu Tyr Val Arg Val Cys Ser Lys Lys Pro Arg Asn Lys Pro 320 305 310 315 Ser Gln Thr Ile Arg Thr Val Gln Ala Lys Pro Ser Ser Ser Lys 335 325 330 Thr Ser Asp Pro Leu Ala Ser Lys Thr Thr Thr Lys Ala Pro Ser 340 345 350 Val Lys Pro Lys Val Lys Gln Pro Lys Val Lys Ala Glu Pro Pro 355 360 365

<210> 3251

<211> 1367

<212> PRT

<213> Homo sapiens

<400> 3251

Met Gly Asn Ser Asp Ser Gln Tyr Thr Leu Gln Gly Ser Lys Asn His

1 5 10 15

Ser Asn Thr Ile Thr Gly Ala Lys Gln Ile Pro Cys Ser Leu Lys Ile
20 25 30

Arg Gly Ile His Ala Lys Glu Glu Lys Ser Leu His Gly Trp Gly His

		35					40					45			
Gly	Ser	Asn	Gly	Ala	Gly	Tyr	Lys	Ser	Arg	Ser	Leu	Ala	Arg	Ser	Cys
	50					55					60				
Leu	Ser	His	Phe	Lys	Ser	Asn	Gln	Pro	Tyr	Ala	Ser	Arg	Leu	Gly	Gly
65					70					75					80
Pro	Thr	Cys	Lys	Val	Ser	Arg	Gly	Val	Ala	Tyr	Ser	Thr	His	Arg	Thr
				85					90					95	
Asn	Ala	Pro	Gly	Lys	Asp	Phe	Gln	Gly	Ile	Ser	Ala	Ala	Phe	Ser	Thr
			100					105					110		
Glu	Asn	Gly	Phe	His	Ser	Val	Gly	His	Glu	Leu	Ala	Asp	Asn	His	Ile
		115					120					125			
Thr	Ser	Arg	Asp	Cys	Asn	Gly	His	Leu	Leu	Asn	Cys	Tyr	Gly	Arg	Asn
	130					135					140				
Glu	Ser	Ile	Ala	Ser	Thr	Pro	Pro	Gly	Glu	Asp	Arg	Lys	Ser	Pro	Arg
145					150					155					160
Val	Leu	Ile	Lys	Thr	Leu	Gly	Lys	Leu	Asp	Gly	Cys	Leu	Arg	Val	Glu
				165					170					175	
Phe	His	Asn	Gly	Gly	Asn	Pro	Ser	Lys	Val	Pro	Ala	Glu	Asp	Cys	Ser
			180					185					190		
Glu	Pro	Val	Gln	Leu	Leu	Arg	Tyr	Ser	Pro	Thr	Leu	Ala	Ser	Glu	Thr
		195					200					205			
Ser	Pro	Val	Pro	Glu	Ala	Arg	Arg	Gly	Ser	Ser	Ala	Asp	Ser	Leu	Pro
	210					215					220				
Ser	His	Arg	Pro	Ser	Pro	Thr	Asp	Ser	Arg	Leu	Arg	Ser	Ser	Lys	Gly
225					230					235					240
Ser	Ser	Leu	Ser	Ser	Glu	Ser	Ser	Trp	Tyr	Asp	Ser	Pro	Trp	Gly	Asn
		•		245					250					255	
Ala	Gly	Glu	Leu	Ser	Glu	Ala	Glu	Gly	Ser	Phe	Leu	Ala	Pro	Gly	Met
			260					265					270		

Pro	Asp	Pro	Ser	Leu	His	Ala	Ser	Phe	Pro	Pro	Gly	Asp	Ala	Lys	Lys
		275					280					285			
Pro	Phe	Asn	Gln	Ser	Ser	Ser	Leu	Ser	Ser	Leu	Arg	Glu	Leu	Tyr	Lys
	290					295					300				
Asp	Ala	Asn	Leu	Gly	Ser	Leu	Ser	Pro	Ser	Gly	Ile	Arg	Leu	Ser	Asp
305					310					315					320
Glu	Tyr	Met	Gly	Thr	His	Ala	Ser	Leu	Ser	Asn	His	Val	Ser	Phe	Ala
				325					330					335	
Ser	Asp	Ile	Asp	Val	Pro	Ser	Arg	Val	Ala	His	Gly	Asp	Pro	Ile	Gln
			340					345					350		
Tyr	Ser	Ser	Phe	Thr	Leu	Pro	Cys	Arg	Lys	Pro	Lys	Ala	Phe	Val	Glu
		355					360					365			
Asp	Thr	Ala	Lys	Lys	Asp	Ser	Leu	Lys	Ala	Arg	Met	Arg	Arg	Ile	Ser
	370		٠			375					380				
Asp	Trp	Thr	Gly	Ser	Leu	Ser	Arg	Lys	Lys	Arg	Lys	Leu	Gln	Glu	Pro
385					390					395					400
Arg	Ser	Lys	Glu	Gly	Ser	Asp	Tyr	Phe	Asp	Ser	Arg	Ser	Asp	Gly	Leu
				405					410					415	
Asn	Thr	Asp	Val	Gln	Gly	Ser	Ser	Gln	Ala	Ser	Ala	Phe	Leu	Trp	Ser
			420			٠		425					430		
Gly	Gly	Ser	Thr	Gln	Ile	Leu	Ser	Gln	Arg	Ser	Glu	Ser	Thr	His	Ala
		435					440					445			
Ile	Gly	Ser	Asp	Pro	Leu	Arg	Gln	Asn	Ile	Tyr	Glu	Asn	Phe	Met	Arg
	450					455					460				
Glu	Leu	Glu	Met	Ser	Arg	Thr	Asn	Thr	Glu	Asn	Ile	Glu	Thr	Ser	Thr
465					470					475					480
Glu	Thr	Ala	Glu	Ser	Ser	Ser	Glu	Ser	Leu	Ser	Ser	Leu	Glu	Gln	Leu
				485					490					495	
Asp	Leu	Leu	Phe	Glu	Lvs	Glu	Gln	Glv	Val	Val	Arg	Lvs	Ala	Glv	Trp

			500					505					510		
Leu	Phe	Phe	Lys	Pro	Leu	Val	Thr	Val	Gln	Lys	Glu	Arg	Lys	Leu	Glu
		515					520					525			
Leu	Val	Ala	Arg	Arg	Lys	Trp	Lys	Gln	Tyr	Trp	Val	Thr	Leu	Lys	Gly
	530					535					540				
Cys	Thr	Leu	Leu	Phe	Tyr	Glu	Thr	Tyr	Gly	Lys	Asn	Ser	Met	Asp	Gln
545					550					555					560
Ser	Ser	Ala	Pro	Arg	Cys	Ala	Leu	Phe	Ala	Glu	Asp	Ser	Ile	Val	Gln
				565					570					575	
Ser	Val	Pro	Glu	His	Pro	Lys	Lys	Glu	Asn	Val	Phe	Cys	Leu	Ser	Asn
			580					585					590		
Ser	Phe	Gly	Asp	Val	Tyr	Leu	Phe	Gln	Ala	Thr	Ser	Gln	Thr	Asp	Leu
		595					600					605			
Glu	Asn	Trp	Val	Thr	Ala	Val	His	Ser	Ala	Cys	Ala	Ser	Leu	Phe	Ala
	610					615					620				
Lys	Lys	His	Gly	Lys	Glu	Asp	Thr	Leu	Arg	Leu	Leu	Lys	Asn	Gln	Thr
625					630					635					640
Lys	Asn	Leu	Leu	Gln	Lys	Ile	Asp	Met	Asp	Ser	Lys	Met	Lys	Lys	Met
				645					650					655	
Ala	Glu	Leu	Gln	Leu	Ser	Val	Val	Ser	Asp	Pro	Lys	Asn	Arg	Lys	Ala
		,	660					665					670		
Ile	Glu	Asn	Gln	Ile	Gln	Gln	Trp	Glu	Gln	Asn	Leu	Glu	Lys	Phe	His
		675					680					685			
Met	Asp	Leu	Phe	Arg	Met	Arg	Cys	Tyr	Leu	Ala	Ser	Leu	Gln	Gly	Gly
	690					695					700				
Glu	Leu	Pro	Asn	Pro	Lys	Ser	Leu	Leu	Ala	Ala	Ala	Ser	Arg	Pro	Ser
705					710					715					720
Lys	Leu	Ala	Leu	Gly	Arg	Leu	Gly	Ile	Leu	Ser	Val	Ser	Ser	Phe	His
				725					730					735	

Ala	Leu	Val	Cys	Ser	Arg	Asp	Asp	Ser	Ala	Leu	Arg	Lys	_	Inr	Leu
			740					745					750		
Ser	Leu	Thr	Gln	Arg	Gly	Arg	Asn	Lys	Lys	Gly	Ile	Phe	Ser	Ser	Leu
		755					760					765			
Lys	Gly	Leu	Asp	Thr	Leu	Ala	Arg	Lys	Gly	Lys	Glu	Lys	Arg	Pro	Ser
	770				,	775					780				
Ile	Thr	Gln	Val	Asp	Glu	Leu	Leu	His	Ile	Tyr	Gly	Ser	Thr	Val	Asp
785					790					795					800
Gly	Val	Pro	Arg	Asp	Asn	Ala	Trp	Glu	Ile	Gln	Thr	Tyr	Val	His	Phe
				805					810					815	
Gln	Asp	Asn	His	Gly	Val	Thr	Val	Gly	Ile	Lys	Pro	Glu	His	Arg	Val
			820					825					830		
Glu	Asp	Ile	Leu	Thr	Leu	Ala	Cys	Lys	Met	Arg	Gln	Leu	Glu	Pro	Ser
		835					840			•		845			
His	Tyr	Gly	Leu	Gln	Leu	Arg	Lys	Leu	Val	Asp	Asp	Asn	Val	Glu	Tyr
	850					855		-			860				
Cys	Ile	Pro	Ala	Pro	Tyr	Glu	Tyr	Met	Gln	Gln	Gln	Val	Tyr	Asp	Glu
865					870					875					880
Ile	Glu	Val	Phe	Pro	Leu	Asn	Val	Tyr	Asp	Val	Gln	Leu	Thr	Lys	Thr
				885					890					895	
Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Val	Thr	Ala	Gln	Val	Asp	Glu
			900			•		905					910		
Arg	Gln	His	Leu	Ser	Arg	Ile	Phe	Ile	Ser	Asp	Val	Leu	Pro	Asp	Gly
		915					920					925			
Leu	Ala	Tyr	Gly	Glu	Gly	Leu	Arg	Lys	Gly	Asn	Glu	Ile	Met	Thr	Leu
	930					935					940				
Asn	Gly	Glu	Ala	Val	Ser	Asp	Leu	Asp	Leu	Lys	Gln	Met	Glu	Ala	Leu
945					950					955					960
Phe	Ser	Glu	Lys	Ser	Val	Gly	Leu	Thr	Leu	Ile	Ala	Arg	Pro	Pro	Asp

			965					970					975	
Thr Lys	Ala	Thr	Leu	Cys	Thr	Ser	Trp	Ser	Asp	Ser	Asp	Leu	Phe	Ser
		980					985					990		
Arg Asp	Gln	Lys	Ser	Leu	Leu	Pro	Pro	Pro	Asn	Gln	Ser	Gln	Leu	Leu
	995]	1000				;	1005			
Glu Glu	Phe	Leu	Asp	Asn	Phe	Lys	Lys	Asn	Thr	Ala	Asn	Asp	Phe	Ser
1010]	1015				-	1020				
Asn Val	Pro	Asp	Ile	Thr	Thr	Gly	Leu	Lys	Arg	Ser	Gln	Thr	Asp	Gly
1025]	1030					1035					1040
Thr Leu	Asp	Gln	Val	Ser	His	Arg	Glu	Lys	Met	Glu	Gln	Thr	Phe	Arg
]	1045					1050]	1055	
Ser Ala	Glu	Gln	Ile	Thr	Ala	Leu	Cys	Arg	Ser	Phe	Asn	Asp	Ser	Gln
]	1060					1065				-	1070		
Ala Asn	Gly	Met	Glu	Gly	Pro	Arg	Glu	Asn	Gln	Asp	Pro	Pro	Pro	Arg
1	075]	1080				-	1085			
Pro Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys	Val	Ile
1090				:	1095				•	1100				
Gln Glu	Leu	Val	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu	Ser	Cys
1105]	1110				-	1115					1120
Leu Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe	Leu	Thr
]	1125				-	1130					1135	
Gln Asp	Glu	Met	Glu	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met	Leu	Glu
]	1140					1145					1150		
Phe Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	Gly	Ile	Ser	Ala	Ser
1	155					1160					1165			
Ser Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys	Leu	Leu
1170				-	1175					1180				
Phe Ser	Leu	Gly	Gly	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe	Lys	Leu
1185			-	1190					1195					1200

Tyr Ser Gly Phe	Cys Ala Asn	His Ile Lys	Val Gln Lys	Val Leu Glu
1	1205	1210		1215
Arg Ala Lys Thr	Asp Lys Ala	Phe Lys Ala	Phe Leu Asp	Ala Arg Asn
1220		1225		1230
Pro Thr Lys Gln	His Ser Ser	Thr Leu Glu	Ser Tyr Leu	Ile Lys Pro
1235		1240	1245	
Val Gln Arg Val	Leu Lys Tyr	Pro Leu Leu	Leu Lys Glu	Leu Val Ser
1250	1255		1260	
Leu Thr Asp Gln	Glu Ser Glu	Glu His Tyr	His Leu Thr	Glu Ala Leu
1265	1270		1275	1280
Lys Ala Met Glu	Lys Val Ala	Ser His Ile	Asn Glu Met	Gln Lys Ile
1	1285	1290		1295
Tyr Glu Asp Tyr	Gly Thr Val	Phe Asp Arg	Leu Val Ala	Glu Gln Ser
1300		1305		1310
Gly Thr Glu Lys	Glu Val Thr	Glu Leu Ser	Met Gly Glu	Leu Leu Met
1315		1320	1325	
His Ser Thr Val	Ser Trp Leu	Asn Pro Phe	Leu Ser Leu	Gly Lys Ala
1330	1335		1340	
Arg Lys Asp Leu	Glu Leu Thr	Val Phe Val	Phe Lys Arg	Ala Val Ile
1345	1350		1355	1360
Leu Val Tyr Lys	Glu Asn Cys			

<211> 238

<212> PRT

<213> Homo sapiens

1365

<400> 3252

Met Ile Ser Ser Tyr Leu Val Cys Leu Phe Thr Asp Thr Ile Arg Tyr

1 5 10 15

Leu Ser Leu His Asp Asn Lys Tyr Ile Arg Tyr Phe Pro Gly His Ser
20 25 30

Lys Arg Val Val Ala Leu Ser Met Ser Pro Val Asp Asp Thr Phe Ile 35 40 45

Ser Gly Ser Leu Asp Lys Thr Ile Arg Leu Trp Asp Leu Arg Ser Pro
50 55 60

Asn Cys Gln Gly Leu Met His Leu Gln Gly Lys Pro Val Cys Ser Phe 65 70 75 80

Asp Pro Glu Gly Leu Ile Phe Ala Ala Gly Val Asn Ser Glu Met Val
85 90 95

Lys Leu Tyr Asp Leu Arg Ser Phe Asp Lys Gly Pro Phe Ala Thr Phe
100 105 110

Lys Met Gln Tyr Asp Arg Thr Cys Glu Trp Thr Gly Leu Lys Phe Ser 115 120 125

Asn Asp Gly Lys Leu Ile Leu Ile Ser Thr Asn Gly Ser Phe Ile Arg
130 135 140

Leu Ile Asp Ala Phe Lys Gly Val Val Met His Thr Phe Gly Gly Tyr
145 150 155 160

Ala Asn Ser Lys Ala Val Thr Leu Glu Ala Ser Phe Thr Pro Asp Ser 165 170 175

Gln Phe Ile Met Ile Gly Ser Glu Asp Gly Lys Ile His Val Trp Asn 180 185 190

Gly Glu Ser Gly Ile Lys Val Ala Val Leu Asp Gly Lys His Thr Gly
195 200 205

Pro Ile Thr Cys Leu Gln Phe Asn Pro Lys Phe Met Thr Phe Ala Ser 210 215 220 Ala Cys Ser Asn Met Ala Phe Trp Leu Pro Thr Ile Asp Asp
225 230 235

<210> 3253

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3253

Met Gln Glu Ala Thr Leu Ser His Pro Arg Tyr Cys Pro His Thr Gln

1 5 10 15

Ala Ala Leu Asn Ile Pro His Asn Lys Ala Lys Gly Ser Asp Lys

20 25 30

Ser Tyr Tyr Ser Gln Pro Ser His Leu Glu Thr Arg Gly Glu Thr Asn

35 40 45

Leu Pro Leu Asp Val Leu Arg Glu Arg Gln Asp Pro Gln Arg Asn Leu

50 55 60

Ser Glu Leu Ser Thr Cys Leu Ile Gln Gln Asp Arg Asp Gly Arg Arg

65 70 75 80

Leu Ala Phe Ser Phe Ala Trp Val Ser Thr Ile Leu Gln Gly Lys Leu

85 90 95

Cys Gly Gln Leu Gly Asn Thr Thr Ile Asn Trp Arg Gly Met Asn Asn

100 105 110

Arg Val Ser Gly Ala Val Cys

115

<210> 3254

<211> 881

<212> PRT

<213> Homo sapiens

<400> 3254

Met Asn Tyr Pro Gly Arg Gly Ser Pro Arg Ser Pro Glu His Asn Gly

1 5 10 15

Arg Gly Gly Gly Gly Ala Trp Glu Leu Gly Ser Asp Ala Arg Pro
20 25 30

Ala Phe Gly Gly Val Cys Cys Phe Glu His Leu Pro Gly Gly Asp
35 40 45

Pro Asp Asp Gly Asp Val Pro Leu Ala Leu Leu Arg Gly Glu Pro Gly 50 55 60

Leu His Leu Ala Pro Gly Thr Asp Asp His Asn His His Leu Ala Leu 65 70 75 80

Asp Pro Cys Leu Ser Asp Glu Asn Tyr Asp Phe Ser Ser Ala Glu Ser

85 90 95

Gly Ser Ser Leu Arg Tyr Tyr Ser Glu Gly Glu Ser Gly Gly Gly
100 105 110

Gly Gly Ser Ser Leu Ser Leu His Pro Pro Gln Gln Pro Pro Leu Val
115 120 125

Pro Thr Asn Ser Gly Gly Gly Gly Ala Thr Gly Gly Ser Pro Gly Glu 130 135 140

Arg Lys Arg Thr Arg Leu Gly Gly Pro Ala Ala Arg His Arg Tyr Glu 145 150 155 160

Val Val Thr Glu Leu Gly Pro Glu Glu Val Arg Trp Phe Tyr Lys Glu 165 170 175

Asp Lys Lys Thr Trp Lys Pro Phe Ile Gly Tyr Asp Ser Leu Arg Ile 180 185 190

Glu	Leu	Ala	Phe	Arg	Thr	Leu	Leu	Gln	Thr	Thr	Gly	Ala	Arg	Pro	Gln
		195					200					205			
Gly	Gly	Asp	Arg	Asp	Gly	Asp	His	Val	Cys	Ser	Pro	Thr	Gly	Pro	Ala
	210					215					220				
Ser	Ser	Ser	Gly	Glu	Asp	Asp	Asp	Glu	Asp	Arg	Ala	Cys	Gly	Phe	Cys
225					230					235					240
Gln	Ser	Thr	Thr	Gly	His	Glu	Pro	Glu	Met	Val	Glu	Leu	Val	Asn	Ile
				245					250					255	
Glu	Pro	Val	Cys	Val	Arg	Gly	Gly	Leu	Tyr	Glu	Val	Asp	Val	Thr	Gln
			260					265					270		
Gly	Glu	Cys	Tyr	Pro	Val	Tyr	Trp	Asn	Gln	Ala	Asp	Lys	Ile	Pro	Val
		275					280					285			
Met	Arg	Gly	Gln	Trp	Phe	Ile	Asp	Gly	Thr	Trp	Gln	Pro	Leu	Glu	Glu
	290					295					300				
Glu	Glu	Ser	Asn	Leu	Ile	Glu	Gln	Glu	His	Leu	Asn	Cys	Phe	Arg	Gly
305					310					315					320
Gln	Gln	Met	Gln	Glu	Asn	Phe	Asp	Ile	Glu	Val	Ser	Lys	Ser	Ile	Asp
				325					330					335	
Gly	Lys	Asp	Gly	Ser	Gly	Ile	Asn	Tyr	Ser	Ala	Val	His	Ser	Phe	Lys
			340					345					350		
Leu	Ser	Arg	Asn	His	Val	Asp	Trp	His	Ser	Val	Asp	Glu	Val	Tyr	Leu
		355					360					365			
Tyr	Ser	Asp	Ala	Thr	Thr	Ser	Lys	Ile	Ala	Arg	Thr	Val	Thr	Gln	Lys
	370					375					380		-		
Leu	Gly	Phe	Ser	Lys	Ala	Ser	Ser	Ser	Gly	Thr	Arg	Leu	His	Arg	Gly
385	•				390					395					400
Tyr	Val	Glu	Glu	Ala	Thr	Leu	Glu	Asp	Lys	Pro	Ser	Gln	Thr	Thr	His
				405					410					415	
Ile	Val	Phe	Val	Val	His	Glv	Ile	Gly	Gln	Lys	Met	Asp	Gln	Gly	Arg

			420					425					430		
Ile	Ile	Lys	Asn	Thr	Ala	Met	Met	Arg	Glu	Ala	Ala	Arg	Lys	Ile	Glu
		435					440					445			
Glu	Arg	His	Phe	Ser	Asn	His	Ala	Thr	His	Val	Glu	Phe	Leu	Pro	Val
	450					455					460				
Glu	Trp	Arg	Ser	Lys	Leu	Thr	Leu	Asp	Gly	Asp	Thr	Val	Asp	Ser	Ile
465					470					475					480
Thr	Pro	Asp	Lys	Val	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
				485					490					495	
Met	Asp	Ile	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
			500					505					510		
Lys	Gly	Leu	Gln	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser
		515					520					525			
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	Gly	Gly	Lys	Val	Ser	Ile	Val	Ser
	530					535					540				
His	Ser	Leu	Gly	Cys	Val	Ile	Thr	Tyr	Asp	Ile	Met	Thr	Gly	Trp	Asn
545					550					555					560
Pro	Val	Arg	Leu	Tyr	Glu	Gln	Leu	Leu	Gln	Lys	Glu	Glu	Glu	Leu	Pro
				565					570					575	
Asp	Glu	Arg	Trp	Met	Ser	Tyr	Glu	Glu	Arg	His	Leu	Leu	Asp	Glu	Leu
			580					585					590		
Tyr	Ile	Thr	Lys	Arg	Arg	Leu	Lys	Glu	Ile	Glu	Glu	Arg	Leu	His	Gly
		595					600					605			
Leu	Lys	Ala	Ser	Ser	Met	Thr	Gln	Thr	Pro	Ala	Leu	Lys	Phe	Lys	Val
	610					615					620				
Glu	Asn	Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala	Val	Phe	Leu	Ala	Leu
625					630					635					640
Arg	Gly	Ile	Arg	Pro	Gly	Asn	Thr	Gly	Ser	Gln	Asp	His	Ile	Leu	Pro
				645					650					655	

Arg	Glu	Ile	Cys	Asn	Arg	Leu	Leu	Asn	Ile	Phe	His	Pro	Thr	Asp	Pro
			660					665					670		
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	Ile	Leu	Lys	His	Tyr	Ser	Asn	Ile
		675					680					685			
Ser	Pro	Val	Gln	Ile	His	Trp	Tyr	Asn	Thr	Ser	Asn	Pro	Leu	Pro	Tyr
	690					695					700				
Glu	His	Met	Lys	Pro	Ser	Phe	Leu	Asn	Pro	Ala	Lys	Glu	Pro	Thr	Ser
705					710					715					720
Val	Ser	Glu	Asn	Glu	Gly	Ile	Ser	Thr	Ile	Pro	Ser	Pro	Val	Thr	Ser
				725					730					735	
Pro	Val	Leu	Ser	Arg	Arg	His	Tyr	Gly	Glu	Ser	Ile	Thr	Asn	Ile	Gly
			740					745					750		
Lys	Ala	Ser	Ile	Leu	Gly	Ala	Ala	Ser	Ile	Gly	Lys	Gly	Leu	Gly	Gly
		755					760					765			
Met	Leu	Phe	Ser	Arg	Phe	Gly	Arg	Ser	Ser	Thr	Thr	Gln	Ser	Ser	Glu
	770					775					780				
Thr	Ser	Lys	Asp	Ser	Met	Glu	Asp	Glu	Lys	Lys	Pro	Val	Ala	Ser	Pro
785					790					795					800
Ser	Ala	Thr	Thr	Val	Gly	Thr	Gln	Thr	Leu	Pro	His	Ser	Ser	Ser	Gly
				805					810					815	
Phe	Leu	Asp	Ser	Ala	Leu	Glu	Leu	Asp	His	Arg	Ile	Asp	Phe	Glu	Leu
			820					825					830		
Arg	Glu	Gly	Leu	Val	Glu	Ser	Arg	Tyr	Trp	Ser	Ala	Val	Thr	Ser	His
		835					840					845			
Thr	Ala	Tyr	Trp	Ser	Ser	Leu	Asp	Val	Ala	Leu	Phe	Leu	Leu	Thr	Phe
	850					855					860				
Met	Tyr	Lys	His	Glu	His	Asp	Asp	Asp	Ala	Lys	Pro	Asn	Leu	Asp	Pro
865					870					875					880
Ile															

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3255

Met Cys Ala Trp Met Ile Asp Ser Phe Gly Asn Glu Glu Gln Arg His

1 5 10 15

Lys Phe Cys Pro Pro Leu Cys Thr Met Glu Lys Phe Ala Ser Tyr Cys

20 25 30

Leu Thr Glu Pro Gly Ser Gly Ser Asp Ala Ala Ser Leu Leu Thr Ser

35 40 45

Ala Lys Lys Gln Gly Asp His Tyr Ile Leu Asn Gly Ser Lys Ala Phe

50 55 60

Ile Ser Gly Ala Gly Glu Ser Asp Ile Tyr Val Val Met Cys Arg Thr

65 70 75 80

Gly Gly Pro Gly Pro Lys Gly Ile Ser Cys Ile Val Val Glu Lys Gly

85 90 95

Thr Pro Gly Leu Ser Phe Gly Lys Lys Glu Lys Lys Val Ser Gly Cys

100 105 110

Trp Thr Gly Asn Asn Ser Gly Tyr Glu Thr Leu Pro Pro Ala Ser Pro

115 120 125

Thr Pro Ala Leu Phe Gln Lys Thr Gly Leu His Thr Cys

130 135 140

<211> 254

<212> PRT

<213> Homo sapiens

<400> 3256

Met Ala Ala Val Ala Ala Thr Ala Ala Ala Lys Gly Asn Gly Gly

1 5 10 15

Gly Gly Arg Ala Gly Ala Gly Asp Ala Ser Gly Thr Arg Lys Lys

20 25 30

Gly Pro Gly Pro Leu Ala Thr Ala Tyr Leu Val Ile Tyr Asn Val Val

35 40 45

Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr

50 55 60

Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro

65 70 75 80

Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala

85 90 95

Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val. Met

100 105 110

Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val

115 120 125

Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr

130 135 140

Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu

145 150 155 160

Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr

165 170 175

Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro

180 185 190

Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr
195 200 205

Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser 210 215 220

Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg 225 230 235 240

Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu
245 250

<210> 3257

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3257

Met Leu Trp Ser Val Pro Gly Asp Arg Ala Ala Pro Gly His Pro Pro 1 5 10 15

Phe Arg Ser Glu Ala Ser His Pro Thr Gln Gly Pro Ser Thr Thr Ser
20 25 30

Pro Phe Ser Pro Phe Leu Gly Ala Asp Pro Gly Gly Ser Ile Tyr Arg
35 40 45

Gly Val Pro Gly Ser Leu Thr Ala Gly Thr Thr Glu Ala Arg Lys Ser
50 55 60

Cys Leu Ala Pro Ala Gln Gly Thr Gln Gly Arg Leu Gly Ala Pro Ala
65 70 75 80

Gly Ser His Ser Pro Arg Arg Gln Gly Leu Val Tyr Pro Cys Ala Met
85 90 95

Ser Val Ile Gly Leu Cys Ala Gly Ser Val Met Arg Ser Leu Pro Gly
100 105 110

Leu Pro Arg Pro Arg Arg

115

<210> 3258

<211> 804

<212> PRT

<213> Homo sapiens

<400> 3258

Met Arg Pro Val Ala Leu Leu Leu Leu Pro Ser Leu Leu Ala Leu Leu 1 5 10 15

Ala His Gly Leu Ser Leu Glu Ala Pro Thr Val Gly Lys Gly Gln Ala
20 25 30

Pro Gly Ile Glu Glu Thr Asp Gly Glu Leu Thr Ala Ala Pro Thr Pro
35 40 45

Glu Gln Pro Glu Arg Gly Val His Phe Val Thr Thr Ala Pro Thr Leu
50 55 60

Lys Leu Leu Asn His His Pro Leu Leu Glu Glu Phe Leu Gln Glu Gly
65 70 75 80

Leu Glu Lys Gly Asp Glu Glu Leu Arg Pro Ala Leu Pro Phe Gln Pro
85 90 95

Asp Pro Pro Ala Pro Phe Thr Pro Ser Pro Leu Pro Arg Leu Ala Asn 100 105 110

Gln Asp Ser Arg Pro Val Phe Thr Ser Pro Thr Pro Ala Met Ala Ala 115 120 125

Val Pro Thr Gln Pro Gln Ser Lys Glu Gly Pro Trp Ser Pro Glu Ser

	130					135					140				
Glu	Ser	Pro	Met	Leu	Arg	Ile	Thr	Ala	Pro	Leu	Pro	Pro	Gly	Pro	Ser
145					150					155					160
Met	Ala	Val	Pro	Thr	Leu	Gly	Pro	Gly	Glu	Ile	Ala	Ser	Thr	Thr	Pro
				165					170					175	
Pro	Ser	Arg	Alà	Trp	Thr	Pro	Thr	Gln	Glu	Gly	Pro	Gly	Asp	Met	Gly
			180					185					190		
Arg	Pro	Trp	Val	Ala	Glu	Val	Val	Ser	Gln	Gly	Ala	Gly	Ile	Gly	Ιle
		195					200					205			
Gln	Gly	Thr	Ile	Thr	Ser	Ser	Thr	Ala	Ser	Gly	Asp	Asp	Glu	Glu	Thr
	210					215					220				
Thr	Thr	Thr	Thr	Thr	Ile	Ile	Thr	Thr	Thr	Ile	Thr	Thr	Val	Gln	Thr
225					230					235					240
Pro	Gly	Pro	Cys	Ser	Trp	Asn	Phe	Ser	Gly	Pro	Glu	Gly	Ser	Leu	Asp
				245					250					255	
Ser	Pro	Thr	Asp	Leu	Ser	Ser	Pro	Thr	Asp	Val	Gly	Leu	Asp	Cys	Phe
			260					265					270		
Phe	Tyr	Ile	Ser	Val	Tyr	Pro	Gly	Tyr	Gly	Val	Glu	Ile	Lys	Val	Gln
		275					280					285			
Asn	Ile	Ser	Leu	Arg	Glu	Gly	Glu	Thr	Val	Thr	Val	Glu	Gly	Leu	Gly
	290					295					300				
Gly	Pro	Asp	Pro	Leu	Pro	Leu	Ala	Asn	Gln	Ser	Phe	Leu	Leu	Arg	Gly
305					310					315					320
Gln	Val	Ile	Arg	Ser	Pro	Thr	His	Gln	Ala	Ala	Leu	Arg	Phe	Gln	Ser
				325					330					335	
Leu	Pro	Pro	Pro	Ala	Gly	Pro	Gly	Thr	Phe	His	Phe	His	Tyr	Gln	Ala
			340					345					350		
Tyr	Leu	Leu	Ser	Cys	His	Phe	Pro	Arg	Arg	Pro	Ala	Tyr	Gly	Asp	Val
		355					360					365			

Thr	Val	Thr	Ser	Leu	His	Pro	Gly	Gly	Ser	Ala	Arg	Phe	His	Cys	Ala
	370					375					380				
Thr	Gly	Tyr	Gln	Leu	Lys	Gly	Ala	Arg	His	Leu	Thr	Cys	Leu	Asn	Ala
385					390					395					400
Thr	Gln	Pro	Phe	Trp	Asp	Ser	Lys	Glu	Pro	Val	Cys	Ile	Ala	Ala	Cys
				405					410					415	
Gly	Gly	Val	Ile	Arg	Asn	Ala	Thr	Thr	Gly	Arg	Ile	Val	Ser	Pro	Gly
			420					425					430		
Phe	Pro	Gly	Asn	Tyr	Ser	Asn	Asn	Leu	Thr	Cys	His	Trp	Leu	Leu	Glu
		435					440					445			
Ala	Pro	Glu	Gly	Gln	Arg	Leu	His	Leu	His	Phe	Glu	Lys	Val	Ser	Leu
	450					455					460				
Ala	Glu	Asp	Asp	Asp	Arg	Leu	Ile	Ile	Arg	Asn	Gly	Asp	Asn	Val	Glu
465					470					475		,			480
Ala	Pro	Pro	Val	Tyr	Asp	Ser	Tyr	Glu	Val	Glu	Tyr	Leu	Pro	Ile	Glu
				485					490					495	
Gly	Leu	Leu	Ser	Ser	Gly	Lys	His	Phe	Phe	Val	Glu	Leu	Ser	Thr	Asp
			500					505					510		
Ser	Ser	Gly	Ala	Ala	Ala	Gly	Met	Ala	Leu	Arg	Tyr	Glu	Ala	Phe	Gln
		515					520					525			
Gln	Gly	His	Cys	Tyr	Glu	Pro	Phe	Val	Lys	Tyr	Gly	Asn	Phe	Ser	Ser
	530					535					540				
Ser	Thr	Pro	Thr	Tyr	Pro	Val	Gly	Thr	Thr	Val	Glu	Phe	Ser	Cys	Asp
545					550					555					560
Pro	Gly	Tyr	Thr	Leu	Glu	Gln	Gly	Ser	Ile	Ile	Ile	Glu	Cys	Val	Asp
				565					570					575	
Pro	His	Asp	Pro	Gln	Trp	Asn	Glu	Thr	Glu	Pro	Ala	Cys	Arg	Ala	Val
			580					585					590		
Cvs	Ser	Glv	Glu	Ile	Thr	Asp	Ser	Ala	Glv	Val	Val	Leu	Ser	Pro	Asn

		595					600					605			
Trp	Pro	Glu	Pro	Tyr	Gly	Arg	Gly	Gln	Asp	Cys	Ile	Trp	Gly	Val	His
	610					615					620				
Val	Glu	Glu	Asp	Lys	Arg	Ile	Met	Leu	Asp	Ile	Arg	Val	Leu	Arg	Ile
625					630					635					640
Gly	Pro	Gly	Asp	Val	Leu	Thr	Phe	Tyr	Asp	Gly	Asp	Asp	Leu	Thr	Ala
				645					650					655	
Arg	Val	Leu	Gly	Gln	Tyr	Ser	Gly	Pro	Arg	Ser	His	Phe	Lys	Leu	Phe
			660					665					670		
Thr	Ser	Met	Ala	Asp	Val	Thr	Ile	Gln	Phe	Gln	Ser	Asp	Pro	Gly	Thr
		675					680					685			
Ser	Val	Leu	Gly	Tyr	Gln	Gln	Gly	Phe	Val	Ile	His	Phe	Phe	Glu	Val
	690					695					700				
Pro	Arg	Asn	Asp	Thr	Cys	Pro	Glu	Leu	Pro	Glu	Ile	Pro	Asn	Gly	Trp
705					710					715					720
Lys	Ser	Pro	Ser	Gln	Pro	Glu	Leu	Val	His	Gly	Thr	Val	Val	Thr	Tyr
				725					730					735	
Gln	Cys	Tyr	Pro	Gly	Tyr	Gln	Val	Val	Gly	Ser	Ser	Val	Leu	Met	Cys
			740					745		٠			750		
Gln	Trp	Asp	Leu	Thr	Trp	Ser	Glu	Asp	Leu	Pro	Ser	Cys	Gln	Arg	Val
		755					760					765			
Thr	Ser	Cys	His	Asp	Pro	Gly	Asp	Val	Glu	His	Ser	Arg	Arg	Pro	Tyr
	770					775					780				
Pro	Ala	Pro	Ser	Phe	Pro	Trp	Gly	Pro	Pro	Cys	Asn	Ile	Ser	Val	Thr
785					790					795					800
Arg	Val	Leu	Cys												

<210> 3259 <211> 327 <212> PRT <213> Homo sapiens <400> 3259 Met Ala Glu Ala Gln Ser Gly Thr Gly Gln Leu Gln Glu Gln Lys Lys Gly Leu Leu Ile Ala Val Ser Val Ser Val Asp Lys Ile Ile Ser His Phe Gly Ala Ala Arg Asn Leu Val Gln Lys Ala Gln Leu Gly Asp Ser Arg Leu Ser Pro Asp Val Gly His Leu Val Leu Thr Thr Leu Cys Pro Ala Leu His Ala Leu Val Ala Asp Gly Leu Lys Pro Phe Arg Lys Asp Leu Ile Thr Gly Gln Arg Arg Ser Ser Pro Trp Ser Val Val Glu Ala Ser Val Lys Pro Gly Ser Ser Thr Arg Ser Leu Gly Thr Leu Tyr Ser Gln Val Ser Arg Leu Ala Pro Leu Ser Ser Ser Arg Ser Arg Phe His Ala Phe Ile Leu Gly Leu Leu Asn Thr Lys Gln Leu Glu Leu Trp Phe Ser Ser Leu Gln Glu Asp Ala Gly Ser Trp Trp Glu Gln Leu Thr Gln Ala Ser Arg Val Tyr Ala Ser Gly Gly Thr Glu Gly Phe Pro Leu Ser

Arg Trp Ala Pro Gly Arg His Gly Thr Ala Ala Glu Glu Gly Ala Gln

Glu Arg Pro Leu Pro Thr Asp Glu Met Ala Pro Gly Arg Gly Leu Trp Leu Gly Arg Leu Phe Gly Val Pro Gly Gly Pro Ala Glu Asn Glu Asn Gly Ala Leu Lys Ser Arg Arg Pro Ser Ser Trp Leu Pro Pro Thr Val Ser Val Leu Ala Leu Val Lys Arg Gly Ala Pro Pro Glu Met Pro Ser Pro Gln Glu Leu Glu Ala Ser Ala Pro Arg Met Val Gln Thr His Arg Ala Val Arg Ala Leu Cys Asp His Thr Ala Ala Arg Pro Asp Gln Leu Ser Phe Arg Arg Gly Glu Val Leu Arg Val Ile Thr Thr Val Asp Glu Asp Trp Leu Arg Cys Gly Arg Asp Gly Met Glu Gly Leu Val Pro Val Gly Tyr Thr Ser Leu Val Leu

<210> 3260

<211> 1076

<212> PRT

<213> Homo sapiens

<400> 3260

Met Gly Ile Leu Ser Ile Thr Asp Gln Pro Pro Leu Val Gln Ala Ile 1 5 10 15

Phe	Ser	Arg	Asp	Val	Glu	Glu	Val	Arg	Ser	Leu	Leu	Ser	Gln	Lys	Glu
			20					25					30		
Asn	Ile	Asn	Val	Leu	Asp	Gln	Glu	Arg	Arg	Thr	Pro	Leu	His	Ala	Ala
		35					40					45			
Ala	Tyr	Val	Gly	Asp	Val	Pro	Ile	Leu	Gln	Leu	Leu	Leu	Met	Ser	Gly
	50					55					60				
Ala	Asn	Val	Asn	Ala	Lys	Asp	Thr	Leu	Trp	Leu	Thr	Pro	Leu	His	Arg
65					70					75					80
Ala	Ala	Ala	Ser	Arg	Asn	Glu	Lys	Val	Leu	Gly	Leu	Leu	Leu	Ala	His
				85					90					95	
Ser	Ala	Asp	Val	Asn	Ala	Arg	Asp	Lys	Leu	Trp	Gln	Thr	Pro	Leu	His
			100					105					110		
Val	Ala	Ala	Ala	Asn	Arg	Ala	Thr	Lys	Cys	Ala	Glu	Ala	Leu	Ala	Pro
		115					120					125			
Leu	Leu	Ser	Ser	Leu	Asn	Val	Ala	Asp	Arg	Ser	Gly	Arg	Ser	Ala	Leu
	130					135					140				
His	His	Ala	Val	His	Ser	Gly	His	Leu	Glu	Thr	Val	Asn	Leu	Leu	Leu
145					150					155					160
Asn	Lys	Gly	Ala	Ser	Leu	Asn	Val	Cys	Asp	Lys	Lys	Glu	Arg	Gln	Pro
				165					170					175	
Leu	His	Trp	Ala	Ala	Phe	Leu	Gly	His	Leu	Glu	Val	Leu	Lys	Leu	Leu
			180					185					190		
Val	Ala	Arg	Gly	Ala	Asp	Leu	Gly	Cys	Lys	Asp	Arg	Lys	Gly	Tyr	Gly
		195					200					205			
Leu	Leu	His	Thr	Ala	Ala	Ala	Ser	Gly	Gln	Ile	Glu	Val	Val	Lys	Tyr
	210					215					220				
Leu	Leu	Arg	Met	Gly	Ala	Glu	Ile	Asp	Glu	Pro	Asn	Ala	Phe	Gly	Asn
225					230					235					240
Thr	Ala	Leu	His	Ile	Ala	Cys	Tyr	Leu	Gly	Gln	Asp	Ala	Val	Ala	Ile

				245					250					255	
Glu	Leu	Val	Asn	Ala	Gly	Ala	Asn	Val	Asn	Gln	Pro	Asn	Asp	Lys	Gly
			260					265					270		
Phe	Thr	Pro	Leu	His	Val	Ala	Ala	Val	Ser	Thr	Asn	Gly	Ala	Leu	Cys
		275					280					285			
Leu	Glu	Leu	Leu	Val	Asn	Asn	Gly	Ala	Asp	Val	Asn	Tyr	Gln	Ser	Lys
	290					295					300				
Glu	Gly	Lys	Ser	Pro	Leu	His	Met	Ala	Ala	Ile	His	Gly	Arg	Phe	Thr
305					310					315					320
Arg	Ser	Gln	Ile	Leu	Ile	Gln	Asn	Gly	Ser	Glu	Ile	Asp	Cys	Ala	Asp
				325					330					335	
Lys	Phe	Gly	Asn	Thr	Pro	Leu	His	Val	Ala	Ala	Arg	Tyr	Gly	His	Glu
			340					345					350		
Leu	Leu	Ile	Ser	Thr	Leu	Met	Thr	Asn	Gly	Ala	Asp	Thr	Ala	Arg	Arg
		355	•				360					365			
Gly	Ile	His	Asp	Met	Phe	Pro	Leu	His	Leu	Ala	Val	Leu	Phe	Gly	Phe
	370					375					380				
Ser	Asp	Cys	Cys	Arg	Lys	Leu	Leu	Ser	Ser	Gly	Gln	Leu	Tyr	Ser	Πle
385					390					395					400
Val	Ser	Ser	Leu	Ser	Asn	Glu	His	Val	Leu	Ser	Ala	Gly	Phe	Asp	Ιlϵ
				405					410					415	
Asn	Thr	Pro	Asp	Asn	Leu	Gly	Arg	Thr	Cys	Leu	His	Ala	Ala	Ala	Ser
			420					425					430		
Gly	Gly	Asn	Val	Glu	Cys	Leu	Asn	Leu	Leu	Leu	Ser	Ser	Gly	Ala	Asp
•		435					440					445			
Leu	Arg	Arg	Arg	Asp	Lys	Phe	Gly	Arg	Thr	Pro	Leu	His	Tyr	Ala	Ala
	450					455					460				
Ala	Asn	Gly	Ser	Tyr	Gln	Cys	Ala	Val	Thr	Leu	Val	Thr	Ala	Gly	Ala
465					470					475					480

Gly	Val	Asn	Glu	Ala	Asp	Cys	Lys	Gly	Cys	Ser	Pro	Leu	His	Tyr	Ala
				485					490					495	
Ala	Ala	Ser	Asp	Thr	Tyr	Arg	Arg	Ala	Glu	Pro	His	Thr	Pro	Ser	Ser
			500					505					510		
His	Asp	Ala	Glu	Glu	Asp	Glu	Pro	Leu	Lys	Glu	Ser	Arg	Arg	Lys	Glu
		515					520					525			
Ala	Phe	Phe	Cys	Leu	Glu	Phe	Leu	Leu	Asp	Asn	Gly	Ala	Asp	Pro	Ser
	530					535					540				
Leu	Arg	Asp	Arg	Gln	Gly	Tyr	Thr	Ala	Val	His	Tyr	Ala	Ala	Ala	Tyr
545					550					555					560
Gly	Asn	Arg	Gln	Asn	Leu	Glu	Leu	Leu	Leu	Glu	Met	Ser	Phe	Asn	Cys
				565					570					575	
Leu	Glu	Asp	Val	Glu	Ser	Thr	Ile	Pro	Val	Ser	Pro	Leu	His	Leu	Ala
			580					585					590		
Ala	Tyr	Asn	Gly	His	Cys	Glu	Ala	Leu	Lys	Thr	Leu	Ala	Glu	Thr	Leu
		595					600					605			
Val	Asn	Leu	Asp	Val	Arg	Asp	His	Lys	Gly	Arg	Thr	Ala	Leu	Phe	Leu
	610					615					620				
Ala	Thr	Glu	Arg	Gly	Ser	Thr	Glu	Cys	Val	Glu	Val	Leu	Thr	Ala	His
625					630					635					640
Gly	Ala	Ser	Ala	Leu	Ile	Lys	Glu	Arg	Lys	Arg	Lys	Trp	Thr	Pro	Leu
				645					650					655	
His	Ala	Ala	Ala	Ala	Ser	Gly	His	Thr	Asp	Ser	Leu	His	Leu	Leu	Ile
			660					665					670		
Asp	Ser	Gly	Glu	Arg	Ala	Asp	Ile	Thr	Asp	Val	Met	Asp	Ala	Tyr	Gly
		675					680					685			
Gln	Thr	Pro	Leu	Met	Leu	Ala	Ile	Met	Asn	Gly	His	Val	Asp	Cys	Val
	690					695					700				
His	Leu	Leu	Leu	Glu	Lys	Gly	Ser	Thr	Ala	Asp	Ala	Ala	Asp	Leu	Arg

705					710					715					720
Gly	Arg	Thr	Ala	Leu	His	Arg	Gly	Ala	Val	Thr	Gly	Cys	Glu	Asp	Cys
				725					730					735	
Leu	Ala	Ala	Leu	Leu	Asp	His	Asp	Ala	Phe	Val	Leu	Cys	Arg	Asp	Phe
			740					745					750		
Lys	Gly	Arg	Thr	Pro	Ile	His	Leu	Ala	Ser	Ala	Cys	Gly	His	Thr	Ala
		755					760					765			
Val	Leu	Arg	Thr	Leu	Leu	Gln	Ala	Ala	Leu	Ser	Thr	Asp	Pro	Leu	Asp
	770					775					780				
Ala	Gly	Val	Asp	Tyr	Ser	Gly	Tyr	Ser	Pro	Met	His	Trp	Ala	Ser	Tyr
785					790					795					800
Thr	Gly	Arg	Glu	Asp	Cys	Leu	Glu	Leu	Leu	Leu	Glu	His	Ser	Pro	Phe
				805					810					815	
Ser	Tyr	Leu	Glu	Gly	Asn	Pro	Phe	Thr	Pro	Leu	His	Cys	Ala	Val	Ile
			820					825					830		
Asn	Asn	Gln	Asp	Ser	Thr	Thr	Glu	Met	Leu	Leu	Gly	Ala	Leu	Gly	Ala
		835					840					845			
Lys	Ile	Val	Asn	Ser	Arg	Asp	Ala	Lys	Gly	Arg	Thr	Pro	Leu	His	Ala
	850					855					860				
Ala	Ala	Phe	Ala	Asp	Asn	Val	Ser	Gly	Leu	Arg	Met	Leu	Leu	Gln	His
865					870					875					880
Gln	Ala	Glu	Val	Asn	Ala	Thr	Asp	His	Thr	Gly	Arg	Thr	Ala	Leu	Met
				885					890					895	
Thr	Ala	Ala	Glu	Asn	Gly	Gln	Thr	Ala	Ala	Val	Glu	Phe	Leu	Leu	Tyr
			900					905					910		
Arg	Gly	Lys	Ala	Asp	Leu	Thr	Val	Leu	Asp	Glu	Asn	Lys	Asn	Thr	Ala
		915					920					925			
Leu	His	Leu	Ala	Cys	Ser	Lys	Gly	His	Glu	Lys	Cys	Ala	Leu	Met	Ile
	930					935					940				

Leu Ala Glu Thr Gln Asp Leu Gly Leu Ile Asn Ala Thr Asn Ser Ala 960 945 950 955 Leu Gln Met Pro Leu His Ile Ala Ala Arg Asn Gly Leu Ala Ser Val 965 970 975 Val Gln Ala Leu Leu Ser His Gly Ala Thr Val Leu Ala Val Asp Glu 985 990 980 Glu Gly His Thr Pro Ala Leu Ala Cys Ala Pro Asn Lys Asp Val Ala 995 1000 1005 Asp Cys Leu Ala Leu Ile Leu Ser Thr Met Lys Pro Phe Pro Pro Lys 1010 1015 1020 Asp Ala Val Ser Pro Phe Ser Phe Ser Leu Leu Lys Asn Cys Ser Ile 1025 1030 1035 1040 Ala Ala Ala Lys Thr Val Gly Gly Cys Gly Ala Leu Pro His Gly Ala 1045 1050 1055 Ser Cys Pro Tyr Ser Gln Glu Arg Pro Gly Ala Ile Gly Leu Asp Gly 1060 1065 1070 Cys Tyr Ser Glu 1075

<210> 3261

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3261

Met His Ser Pro Arg Thr Gln Ile Ile Trp Phe Cys Phe Thr Lys Ser

1 5 10 15

Lys Cys Ser Thr Cys Ile Ser Leu Phe Gln Thr Glu Met Ala Ile Lys

20 25 30 His Val Phe Gln Lys Val Phe Ala Gly Glu Lys Met Arg Lys Val Lys 40 35 45 Glu Ser Phe Pro Asp Pro Asp Leu Arg Arg Lys Gly Glu Asp Thr Phe 55 60 50 Cys Phe Val Ala Tyr Leu Leu Trp Ala Lys Ser Tyr Tyr Cys Leu Arg 70 75 80 65 Glu Val Arg Leu Thr Leu Ala His Pro Trp Gly Ile Ser Cys Ala Cys 85 90 95 Gly Gly Glu Thr Asn Gln Val Gly Asn Asn Ser Phe Ser Pro Tyr Leu 100 105 110 Ser Ser Phe His Val Leu Leu Trp Asn Lys Ser Asp 115 120

<210> 3262

<211> 116

<212> PRT

<213> Homo sapiens

<400> 3262

Met Val Leu Leu Leu Phe Cys Cys Cys Leu Arg Arg Ser Phe Val Leu

1 5 10 15

Val Ala Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Ser Ser 20 25 30

Pro Gln Pro Pro Pro Pro Gly Phe Lys Gln Phe Ser Cys Leu Ser Leu
35 40 45

Pro Ser Ser Trp Asp Tyr Arg His Val Pro Pro Pro His Pro Ala Asn
50 55 60

Phe Val Phe Leu Val Glu Thr Gly Phe Leu His Val Asp Gln Ala Gly Leu Glu Pro Pro Thr Ser Gly Val Pro Pro Thr Ser Ala Phe Gln Ser Ala Gly Ile Thr Gly Met Ser His Pro Ala Asn Glu Trp Phe Leu Lys Gln Lys Ser Gln <210> 3263 <211> 115 <212> PRT <213> Homo sapiens <400> 3263 Met Gly Met Leu Ser Leu Gly Glu Pro Glu Lys Ala Ser Leu Arg Arg Gln Pro Glu Gly Gly Glu Asp Asn Val Lys Lys Glu Pro Val Thr Ala Gln Cys Pro Gly Gly Val Gly Val Ser Arg Lys His Ser Arg Gln Arg Glu Glu Lys Tyr Arg Gly Arg Thr Ala Val Glu His Leu Gln Glu Ile

Leu Cys Gly Trp Thr Thr Ala Gln Gly Lys Arg Gly Thr Ser Gly Gly

Arg His Glu Val Gly Lys Glu Met Ala Arg Arg Ser Gln Gly Phe Val

Gly Tyr Ser Gly Val Asn Gly Arg Arg Gln Ala Thr Phe Ser Leu Leu

100 105 110

Ile Ser Phe

115

<210> 3264

<211> 244

<212> PRT

<213> Homo sapiens

<400> 3264

Met Ala Pro Ser Ser Glu Ser Ser Val Pro Ser His Ser Met Ser Ser

1 5 10 15

Arg Arg Asp Thr Asp Ser Asp Thr Gln Asp Ala Asn Asp Ser Ser Cys

20 25 30

Lys Ser Ser Glu Arg Ser Leu Pro Asp Cys Thr Leu His Pro Asn Ser

35 40 45

Ile Ser Ile Asp Ala Gly Pro Arg Gln Ala Pro Lys Ile Ala Gln Ile

50 55 60

Lys Arg Asn Leu Ser Tyr Gly Asp Asn Ser Asp Pro Ala Leu Glu Ala

65 70 75 80

Ser Ser Leu Pro Pro Pro Asp Pro Trp Leu Glu Thr Ser Ser Ser Ser

85 90 95

Pro Ala Glu Pro Ala Gln Pro Gly Ala Cys Arg Arg Asp Gly Tyr Trp

100 105 110

Phe Leu Lys Leu Cln Ala Glu Thr Glu Arg Leu Glu Gly Trp Cys

115 120 125

Cys Gln Met Asp Lys Glu Thr Lys Glu Asn Asn Leu Ser Glu Glu Val

130 135 140

Leu Gly Lys Val Leu Ser Ala Val Gly Ser Ala Gln Leu Leu Met Ser 150 145 155 160 Gln Lys Phe Gln Gln Phe Arg Gly Leu Cys Glu Gln Asn Leu Asn Pro 170 165 175 Asp Ala Asn Pro Arg Pro Thr Ala Gln Asp Leu Ala Gly Phe Trp Asp 185 190 180 Leu Leu Gln Leu Ser Ile Glu Asp Ile Ser Met Lys Phe Asp Glu Leu 195 200 205 Tyr His Leu Lys Ala Asn Ser Trp Gln Leu Val Glu Thr Pro Glu Lys 210 220 215 Arg Lys Val Ser Met Glu Gln Cys Gly Gly Glu Val Gln Gly Gln Ile 225 230 235 240 Pro Gly Arg Gln

<210> 3265

<211> 817

<212> PRT

<213> Homo sapiens

<400> 3265

Met Thr Ser Ala Ala His Ser Glu Asn Tyr Ser Pro Ala Ser Met Val 1 5 10 15

Thr Glu Val Leu Trp Ile Leu Ser Asp Gln Lys Glu Cys Ala Val Glu
20 25 30

Cys Leu Tyr Asn Asn Ile Val Ile Glu Thr Leu Leu Gln Pro Ile His

35 40 45

Asn Leu Met Lys Gly Asn Glu Ala Ser Pro Asn Cys Ser Glu Thr Ala

	50					55					60				
Leu	Ile	His	Ile	Ala	Gly	Ile	Leu	Val	Arg	Ile	Ala	Ser	Val	Glu	Glu
65					70					75					80
Gly	Leu	Ile	Leu	Leu	Leu	Tyr	Gly	Ala	Asn	Met	Asn	Ser	Ser	Glu	Glu
				85					90					95	
Ser	Pro	Thr	Gly	Ala	His	Ile	Ile	Ala	Gln	Phe	Ser	Lys	Lys	Leu	Leu
			100					105					110		
Asp	Glu	Asp	Ile	Ser	Ile	Phe	Ser	Gly	Ser	Glu	Met	Leu	Pro	Val	Val
		115					120					125			
Lys	Gly	Ala	Phe	Ile	Ser	Val	Cys	Arg	His	Ile	Tyr	Ser	Thr	Cys	Glu
	130					135					140				
Gly	Leu	Gln	Val	Leu	Ile	Thr	Tyr	Asn	Leu	His	Glu	Ser	Ile	Ala	Lys
145					150					155					160
Ala	Trp	Lys	Lys	Thr	Ser	Leu	Leu	Ser	Glu	Arg	Ile	Pro	Thr	Pro	Val
				165					170					175	
Glu	Gly	Ser	Asp	Ser	Val	Ser	Ser	Val	Ser	Gln	Glu	Ser	Gln	Asn	Ile
			180					185					190		
Met	Ala	Trp	Glu	Asp	Asn	Leu	Leu	Asp	Asp	Leu	Leu	His	Phe	Ala	Ala
		195					200		•			205			
Thr	Pro	Lys	Gly	Leu	Leu	Leu	Leu	Gln	Arg	Thr	Gly	Ala	Ile	Asn	Glu
	210					215					220				
Cys	Val	Thr	Phe	Ile	Phe	Asn	Arg	Tyr	Ala	Lys	Lys	Leu	Gln	Val	Ser
225					230					235					240
Arg	His	Lys	Lys	Phe	Gly	Tyr	Gly	Val	Leu	Val	Thr	Arg	Val	Ala	Ser
				245					250					255	
Thr	Ala	Ala	Gly	Gly	Ile	Ala	Leu	Lys	Lys	Ser	Gly	Phe	Ile	Asn	Glu
			260					265					270		
Leu	Ile	Thr	Glu	Leu	Trp	Ser	Asn	Leu	Glu	Tyr	Gly	Arg	Asp	Asp	Val
		275					280					285			

Arg	vai	Inr	HIS	Pro	Arg	ınr	Inr	Pro	vai	Asp	Pro	He	ASp	Arg	Ser
	290					295					300				
Cys	Gln	Lys	Ser	Phe	Leu	Ala	Leu	Val	Asn	Leu	Leu	Ser	Tyr	Pro	Ala
305					310					315					320
Ile	Tyr	Glu	Leu	Val	Arg	Asn	Gln	Asp	Leu	Pro	Asn	Lys	Thr	Glu	Tyr
				325					330					335	
Ser	Leu	Arg	Glu	Val	Pro	Thr	Cys	Val	Ile	Asp	Ile	Ile	Asp	Arg	Leu
			340					345					350		
Ile	Ile	Leu	Asn	Ser	Glu	Ala	Lys	Ile	Arg	Ser	Leu	Phe	Asn	Tyr	Glu
		355					360					365			
Gln	Ser	His	Ile	Phe	Gly	Leu	Arg	Leu	Leu	Ser	Val	Ile	Cys	Cys	Asp
	370					375					380				
Leu	Asp	Thr	Leu	Leu	Leu	Leu	Glu	Ala	Gln	Tyr	Gln	Val	Ser	Glu	Met
385					390					395					400
Leu	Leu	Asn	Ala	Gln	Glu	Glu	Asn	Ile	Leu	Glu	Ile	Ser	Glu	Ser	His
				405					410					415	
Arg	Asp	Phe	Ile	Ile	Asp	Gly	Leu	Ser	Val	Glu	Arg	Asn	His	Val	Leu
			420					425					430		
Val	Arg	Ile	Asn	Leu	Val	Gly	Gly	Pro	Leu	Glu	Arg	Ile	Leu	Pro	Pro
		435					440					445			
Arg	Leu	Leu	Glu	Lys	Ser	Asp	Asn	Pro	Tyr	Pro	Trp	Pro	Met	Phe	Ser
	450					455					460				
Ser	Tyr	Pro	Leu	Pro	Asn	Cys	Tyr	Leu	Ser	Asp	Ile	Thr	Arg	Asn	Ala
465					470					475					480
Gly	Ile	Lys	Gln	Asp	Asn	Asp	Leu	Asp	Lys	Leu	Leu	Leu	Cys	Leu	Lys
				485					490					495	
Ile	Ser	Asp	Lys	Gln	Thr	Glu	Trp	Ile	Glu	Asn	Cys	Gln	Arg	Gln	Phe
			500					505					510		
Cys	Lys	Met	Met	Lys	Ala	Lys	Pro	Asp	Ile	Ile	Ser	Gly	Glu	Ala	Leu

		515					520					525			
Ile	Glu	Leu	Leu	Glu	Lys	Phe	Val	Leu	His	Leu	Thr	Glu	Ser	Pro	Ser
	530					535					540				
Glu	Cys	Tyr	Phe	Pro	Ser	Val	Glu	Tyr	Thr	Ala	Thr	Asp	Ala	Asn	Val
545					550					555					560
Lys	Asn	Glu	Ser	Leu	Ser	Ser	Val	Gln	Gln	Leu	Gly	Ile	Lys	Met	Thr
				565					570					575	
Val	Arg	Tyr	Gly	Lys	Phe	Leu	Ser	Leu	Leu	Lys	Asp	Gly	Ala	Glu	Asn
			580					585		•			590		
Asp	Leu	Thr	Trp	Val	Leu	Lys	His	Cys	Glu	Arg	Phe	Leu	Lys	Gln	Gln
		595					600					605			
Gļn	Thr	Ser	Ile	Lys	Ser	Ser	Leu	Leu	Cys	Leu	Gln	Gly	Asn	Tyr	Ala
	610					615					620				
Gly	His	Asp	Trp	Phe	Val	Ser	Ser	Leu	Phe	Met	Ile	Met	Leu	Gly	Asp
625					630					635					640
Lys	Glu	Lys	Thr	Phe	Gln	Phe	Leu	His	Gln	Phe	Ser	Arg	Leu	Leu	Thr
				645					650					655	
Ser	Ala	Phe	Leu	Trp	Leu	Pro	Arg	Leu	His	Ile	Ser	Ser	Tyr	Leu	Pro
			660					665					670		
Asn	Asp	Thr	Val	Glu	Ser	Gly	Ile	His	Pro	Val	Tyr	Phe	Cys	Ser	Thr
		675					680					685			
His	Tyr	Ile	Glu	Met	Leu	Leu	Lys	Ala	Glu	Leu	Pro	Leu	Val	Phe	Ser
	690					695					700				
Ala	Phe	His	Met	Ser	Gly	Phe	Ala	Pro	Ser	Gln	Ile	Cys	Leu	Gln	Trp
705					710					715					720
Ile	Thr	Gln	Cys	Phe	Trp	Asn	Tyr	Leu	Asp	Trp	Ile	Glu	Ile	Cys	His
				725					730					735	
Tyr	Ile	Ala	Thr	Cys	Val	Phe	Leu	Gly	Pro	Asp	Tyr	Gln	Val	Tyr	Ile
			740					745					750		

810

815

Thr

<210> 3266

<211> 117

<212> PRT

<213> Homo sapiens

805

<400> 3266

Met Phe Ser His Leu Gln Ile Phe Val Phe Pro Gln Thr Lys Arg Lys

1 5 10 15

Lys Thr Thr Leu Tyr Ser Leu Phe Tyr Ser Val Thr Leu Leu Cys Tyr
20 25 30

Val Arg Asn Leu Lys Tyr Ile Gly Asp Val Gly Ile Leu Ser Leu Thr
35 40 45

Ala His Cys Thr Gly Gln Glu Ser Thr Val Phe Gln Leu Glu Phe Arg
50 55 60

Thr Pro Gly Phe Glu Val Glu Asp Asp His Cys Ser Thr Trp Phe Gly
65 70 75 80

Ile Ala Thr Gly Val Ala Lys Pro Lys Glu Gly Tyr Ile Arg Lys Gly

85 90 95

Gly Val Arg Arg Gln Asn Lys Glu Lys Glu Glu Trp Val Phe Tyr Leu
100 105 110

Phe Ser Phe Ile Asn

115

<210> 3267

<211> 147

<212> PRT

<213> Homo sapiens

<400> 3267

Met Phe Arg Phe His Thr Lys Lys Glu His Thr Phe Thr Ile Phe Ser

1 5 10 15

Gly Gly Cys Leu Leu His Trp Gln Ala Gly Thr Glu Phe Phe Leu
20 25 30

His Asp Lys Ser Gly Gly Leu Leu Val Arg Glu Pro Met Gly Ile Phe
35 40 45

Ser Trp Lys Glu Tyr Ser Ser Ile Pro Ser Pro Asn Pro Thr Val Ile
50 55 60

Phe Ile Thr Leu Gly Gln Gly Cys Ile Glu Cys Val Cys Val Cys Val 65 70 75 80

Cys Val Cys Val Cys Val Arg Val Gly Val Val Leu Gly His 85 90 95

Leu Trp Pro Val Thr Lys Val Thr Arg Thr Ile Cys Val Pro Ala Val
100 105 110

Ile Ala Cys Asp Cys Gly Cys Ile Ser Ser Leu Pro Arg Ser Leu Val 115 120 125 Thr Leu Ser Ala His Gln Gly Arg Glu Leu Ser Thr Asp Thr Cys Gln 130 135 140

Gly Pro Leu

145

<210> 3268

<211> 797

<212> PRT

<213> Homo sapiens

<400> 3268

Met Ala Ala Leu Ala Tyr Asn Leu Gly Lys Arg Glu Ile Asn His Tyr

1 5 10 15

Phe Ser Val Arg Ser Ala Lys Val Leu Ala Leu Val Ala Val Leu Leu 20 25 30

Leu Ala Ala Cys His Leu Ala Ser Arg Arg Tyr Arg Gly Asn Asp Ser

35 40 45

Cys Glu Tyr Leu Leu Ser Ser Gly Arg Phe Leu Gly Glu Lys Val Trp
50 55 60

Gln Pro His Ser Cys Met Met His Lys Tyr Lys Ile Ser Glu Ala Lys
65 70 75 80

Asn Cys Leu Val Asp Lys His Ile Ala Phe Ile Gly Asp Ser Arg Ile 85 90 95

Arg Gln Leu Phe Tyr Ser Phe Val Lys Ile Ile Asn Pro Gln Phe Lys
100 105 110

Glu Glu Gly Asn Lys His Glu Asn Ile Pro Phe Glu Asp Lys Thr Ala 115 120 125

Ser Val Lys Val Asp Phe Leu Trp His Pro Glu Val Asn Gly Ser Met

	130				•	135					140				
Lys	Gln	Cys	Ile	Lys	Val	Trp	Thr	Glu	Asp	Ser	Ile	Ala	Lys	Pro	His
145					150					155					160
Val	Ile	Val	Ala	Gly	Ala	Ala	Thr	Trp	Ser	Ile	Lys	Ile	His	Asn	Gly
				165					170					175	
Ser	Ser	Glu	Ala	Leu	Ser	Gln	Tyr	Lys	Met	Asn	Ile	Thr	Ser	Ile	Ala
			180					185					190		
Pro	Leu	Leu	Glu	Lys	Leu	Ala	Lys	Thr	Ser	Asp	Val	Tyr	Trp	Val	Leu
		195					200					205			
Gln	Asp	Pro	Val	Tyr	Glu	Asp	Leu	Leu	Ser	Glu	Asn	Arg	Lys	Met	Ile
	210					215					220				
Thr	Asn	Glu	Lys	Ile	Asp	Ala	Tyr	Asn	Glu	Ala	Ala	Val	Ser	Ile	Leu
225					230					235					240
Asn	Ser	Ser	Thr	Arg	Asn	Ser	Lys	Ser	Asn	Val	Lys	Met	Phe	Ser	Val
				245					250					255	
Ser	Lys	Leu	Ile	Ala	Gln	Glu	Thr	Ile	Met	Glu	Ser	Leu	Asp	Gly	Leu
			260					265					270		
His	Leu	Pro	Glu	Ser	Ser	Arg	Glu	Thr	Thr	Ala	Met	Ile	Leu	Met	Asn
		275					280					285			
Val	Tyr	Cys	Asn	Lys	Ile	Leu	Lys	Pro	Val	Asp	Gly	Ser	Cys	Cys	Gln
	290					295					300				
Pro	Arg	Pro	Pro	Val	Thr	Leu	Ile	Gln	Lys	Leu	Ala	Ala	Cys	Phe	Phe
305					310					315					320
Thr	Leu	Ser	Ile	Ile	Gly	Tyr	Leu	Ile	Phe	Tyr	Ile	Ile	His	Arg	Asn
				325					330					335	
Ala	His	Arg	Lys	Asn	Lys	Pro	Cys	Thr	Asp	Leu	Glu	Ser	Gly	Glu	Glu
			340					345					350		
Lys	Lys		Ile	Ile	Asn	Thr		Val	Ser	Ser	Leu		Ile	Leu	Leu
		355					360					365			

G	ln	Ser	Phe	Cys	Lys	Leu	Gly	Leu	Ile	Met	Ala	Tyr	Phe	Tyr	Met	Cys
		370					375					380				
A	sp	Arg	Ala	Asn	Leu	Phe	Met	Lys	Glu	Asn	Lys	Phe	Tyr	Thr	His	Ser
3	85					390					395					400
S	er	Phe	Phe	Ile	Pro	Ile	Ile	Tyr	Ile	Leu	Val	Leu	Gly	Val	Phe	Tyr
					405					410					415	
A	sn	Glu	Asn	Thr	Lys	Glu	Thr	Lys	Val	Leu	Asn	Arg	Glu	Gln	Thr	Asp
				420					425					430		
G	lu	Trp	Lys	Gly	Trp	Met	Gln	Leu	Val	Ile	Leu	Ile	Tyr	His	Ile	Ser
			435					440					445			
G	ly	Ala	Ser	Thr	Phe	Leu	Pro	Val	Tyr	Met	His	Ile	Arg	Val	Leu	Val
		450					455					460				
A	la	Ala	Tyr	Leu	Phe	Gln	Thr	Gly	Tyr	Gly	His	Phe	Ser	Tyr	Phe	Trp
4	65					470					475					480
Ι	le	Lys	Gly	Asp	Phe	Gly	Ile	Tyr	Arg	Val	Cys	Gln	Val	Leu	Phe	Arg
					485					490					495	
L	eu	Asn	Phe	Leu	Val	Val	Val	Leu	Cys	Ile	Val	Met	Asp	Arg	Pro	Tyr
				500					505					510		
G	ln	Phe	Tyr	Tyr	Phe	Val	Pro	Leu	Val	Thr	Val	Trp	Phe	Met	Val	Ile
			515					520					525			
T	yr	Val	Thr	Leu	Ala	Leu	Trp	Pro	Gln	Ile	Ile	Gln	Lys	Lys	Ala	Asn
		530					535					540				
G	lу	Asn	Cys	Phe	Trp	His	Phe	Gly	Leu	Leu	Leu	Lys	Leu	Gly	Phe	Leu
5	45					550					555					560
L	eu	Leu	Phe	Ile	Cys	Phe	Leu	Ala	Tyr	Ser	Gln	Gly	Ala	Phe	Glu	Lys
					565					570					575	
Ι	le	Phe	Ser	Leu	Trp	Pro	Leu	Ser	Lys	Cys	Phe	Glu	Leu	Lys	Gly	Asn
				580					585					590		
V	al	Tyr	Glu	Trp	Trp	Phe	Arg	Trp	Arg	Leu	Asp	Arg	Tvr	Val	Val	Phe

His Gly Met Leu Phe Ala Phe Ile Tyr Leu Ala Leu Gln Lys Arg Gln Ile Leu Ser Glu Gly Lys Gly Glu Pro Leu Phe Ser Asn Lys Ile Ser Asn Phe Leu Leu Phe Ile Ser Val Val Ser Phe Leu Thr Tyr Ser Ile Trp Ala Ser Ser Cys Lys Asn Lys Ala Glu Cys Asn Glu Leu His Pro Ser Val Ser Val Val Gln Ile Leu Ala Phe Ile Leu Ile Arg Asn Ile Pro Gly Tyr Ala Arg Ser Val Tyr Ser Ser Phe Phe Ala Trp Phe Gly Lys Ile Ser Leu Glu Leu Phe Ile Cys Gln Tyr His Ile Trp Leu Ala Ala Asp Thr Arg Gly Ile Leu Val Leu Ile Pro Gly Asn Pro Met Leu Asn Ile Ile Val Ser Thr Phe Ile Phe Val Cys Val Ala His Glu Ile Ser Gln Ile Thr Asn Asp Leu Ala Gln Ile Ile Ile Pro Lys Asp Asn Ser Ser Leu Leu Lys Arg Leu Ala Cys Ile Ala Ala Phe Phe Cys Gly Leu Leu Ile Leu Ser Ser Ile Gln Asp Lys Ser Lys His

<210> 3269

<211> 763

<212> PRT

<213> Homo sapiens

<400> 3269

Met His Ser Ser Gln Asn Val Gln Thr Gln Glu Ser Ser Pro Gln

1 5 10 15

Ser Gln Lys Phe Leu Pro Ala Val Gln Ser Ser Ser Phe Ala Ser Ser

20 25 30

Thr His Cys Gln Thr Leu Gln Asn Asn Ile Thr Ser Pro Asp Pro Lys

35 40 45

Ser Tyr Ala Glu Arg Lys Leu Asp Ser Asp Val Tyr Pro Ser Ser Lys

50 55 60

Gln Glu Asp Gly Phe Pro Met Gln Glu Leu Gln Val Leu Gln Pro Gln

65 70 75 80

Ala Ser Leu Glu Ser Ser Thr Gln Arg Leu Ser Asp Gly Glu Ile Asn

85 90 95

Ala Gln Glu Ser Thr Tyr Lys Val Ser Lys Ala Asp Asp Arg Tyr Ser

100 105 110

Gln Ser Val Ile Arg Ser Asn Ser Arg Leu Glu Asp Gln Val Ile Gly

115 120 125

Val Ala Leu Gln Ala Ser Lys Lys Glu Glu Ser Val Val Gly Ser Val

130 135 140

Thr Gln Leu Asn Gln Gln Ile Gly Gln Val Asn Asn Ala Ala Thr Leu

145 150 155 160

Asp Leu Lys Asn Ser Thr Asn Leu Ile Gln Thr Pro Gln Ile Arg Leu

165 170 175

Asn Thr Lys Asp Leu Lys Gln Gln His Pro Leu Ile Leu Lys Val His

180 185 190

Glu Ser Lys Val Gln Glu Gln His Asp Gln Ile Ile Asn Ala Ser Ser

		195					200					205			
Gln	Ile	Gln	Ile	Pro	Asn	His	Ala	Leu	Gly	His	Gly	His	Gln	Ala	Ser
	210					215					220				
Leu	Pro	Asn	Thr	Gln	Val	Leu	Leu	Asp	Ser	Ala	Cys	Asp	Leu	Gln	Ile
225					230					235					240
Leu	Gln	Gln	Ser	Ile	Leu	Gln	Ala	Gly	Leu	Gly	Gln	Val	Lys	Ala	Ser
				245					250					255	
Leu	Gln	Ala	Gln	Arg	Val	Gln	Ser	Pro	Gln	Gln	Ile	Val	His	Pro	Phe
			260					265					270		
Leu	Gln	Met	Glu	Gly	His	Val	Ile	Gln	Ser	Asn	Gly	Asp	His	Ser	Gln
		275					280					285			
Gln	Gln	Leu	His	Pro	Gln	Asn	Ser	Glu	Val	Met	Lys	Met	Asp	Leu	Ser
	290					295					300				
Glu	Ser	Ser	Lys	Pro	Leu	Gln	Gln	His	Leu	Thr	Thr	Lys	Gly	His	Phe
305					310					315					320
Ser	Glu	Thr	Asn	Gln	His	Asp	Ser	Lys	Asn	Gln	Phe	Val	Ser	Leu	Gly
				325					330					335	
Ser	Met	Cys	Phe	Pro	Glu	Ala	Val	Leu	Leu	Ser	Asp	Glu	Arg	Asn	Ile
			340					345					350		
Leu	Ser	Asn	Val	Asp	Asp	Ile	Leu	Ala	Ala	Thr	Ala	Ala	Ala	Cys	Gly
		355					360					365			
Val	Thr	Pro	Thr	Asp	Phe	Ser	Lys	Ser	Thr	Ser	Asn	Glu	Thr	Met	Gln
	370					375					380				
Ala	Val	Glu	Asp	Gly	Asp	Ser	Lys	Ser	His	Phe	Gln	Gln	Ser	Leu	Asp
385					390					395					400
Val	Arg	His	Val	Thr	Ser	Asp	Phe	Asn	Ser	Met	Thr	Ala	Thr	Val	Gly
				405					410					415	
Lys	Pro	Gln	Asn	Ile	Asn	Asp	Thr	Ser	Leu	Asn	Gly	Asn	Gln	Val	Thr
			420					425					430		

Val	Asn	Leu	Ser	Pro	Val	Pro	Ala	Leu	Gln	Ser	Lys	Met	Thr	Leu	Asp
		435					440					445			
Gln	Gln	His	Ile	Glu	Thr	Pro	Gly	Gln	Asn	Ile	Pro	Thr	Lys	Val	Thr
	450					455					460				
Ser	Ala	Val	Val	Gly	Pro	Ser	His	Glu	Val	Gln	Glu	Gln	Ser	Ser	Gly
465					470					475					480
Pro	Phe	Lys	Lys	Gln	Ser	Ala	Thr	Asn	Leu	Glu	Ser	Glu	Glu	Asp	Ser
				485					490					495	
Glu	Ala	Pro	Val	Asp	Ser	Thr	Leu	Asn	Asn	Asn	Arg	Asn	Gln	Glu	Phe
			500					505					510		
Val	Ser	Ser	Ser	Arg	Ser	Ile	Ser	Gly	Glu	Ser	Ala	Thr	Ser	Glu	Ser
		515					520					525			
Glu	Phe	Thr	Leu	Gly	Gly	Asp	Asp	Ser	Gly	Val	Ser	Met	Asn	Pro	Ala
	530					535					540				
Arg	Ser	Ala	Leu	Ala	Leu	Leu	Ala	Met	Ala	Gln	Ser	Gly	Asp	Ala	Val
545					550					555					560
Ser	Val	Lys	Ile	Glu	Glu	Glu	Asn	Gln	Asp	Leu	Met	His	Phe	Asn	Leu
				565					570					575	
Gln	Lys	Lys	Gly	Ala	Lys	Gly	Lys	Gly	Gln	Val	Lys	Glu	Glu	Asp	Asn
			580					585					590		
Ser	Asn	Gln	Lys	Gln	Leu	Lys	Arg	Pro	Ala	Gln	Gly	Lys	Arg	Gln	Asn
		595					600					605			
Pro	Arg	Gly	Thr	Asp	Ile	Tyr	Leu	Pro	Tyr	Thr	Pro	Pro	Ser	Ser	Glu
	610					615					620				
Ser	Cys	His	Asp	Gly	Tyr	Gln	His	Gln	Glu	Lys	Met	Arg	Gln	Lys	Ile
625					630					635					640
Lys	Glu	Val	Glu	Glu	Lys	Gln	Pro	Glu	Val	Lys	Thr	Gly	Phe	Ile	Ala
				645					650					655	
Ser	Phe	Leu	Asp	Phe	Leu	Lvs	Ser	Glv	Pro	Lvs	Gln	Gln	Phe	Ser	Thr

660 665 670 Leu Ala Val Arg Met Pro Asn Arg Thr Arg Arg Pro Gly Thr Gln Met 680 685 675 Val Arg Thr Phe Cys Pro Pro Pro Leu Pro Lys Pro Ser Ser Thr Thr 690 695 700 Pro Thr Pro Leu Val Ser Glu Thr Gly Gly Asn Ser Pro Ser Asp Lys 705 710 715 720 Val Asp Asn Glu Leu Lys Asn Leu Glu His Leu Ser Ser Phe Ser Ser 725 730 735 Asp Glu Asp Asp Pro Gly Tyr Ser Gln Asp Ala Tyr Lys Ser Val Pro 740 745 750 Thr Pro Leu Thr Thr Leu Asp Ala Thr Ser Glu

760

<210> 3270

<211> 133

<212> PRT

<213> Homo sapiens

755

<400> 3270

1 5 10 15

Ile Lys Lys Ser Ser Thr Leu Leu Ile Ile Arg Glu Met Gln Arg Arg
20 25 30

Met Asn Arg His Phe Ser Lys Glu Asp Ile Tyr Val Ala Asn Lys His

Thr Thr Met Arg Tyr His Leu Met Pro Val Arg Met Val Ile Ile Lys
35 40 45

Lys Ser Lys Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Val Gly Thr
50 55 60

Leu Leu His Cys Trp Trp Glu Cys Lys Leu Val Gln Pro Leu Trp Lys 70 65 75 80 Cys Val Trp Leu Phe Leu Lys Asp Leu Glu Leu Glu Ile Leu Phe Val 85 90 95 Pro Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Glu Tyr Lys Pro Phe 100 105 110 Tyr Tyr Lys Asp Thr Cys Thr Phe Leu Phe Ile Ala Ala Leu Phe Thr 115 120 125 Ile Ala Lys Thr Gln 130

<210> 3271

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3271

Met Ala Ser Thr Ala Ala Asn Leu Leu Ala Asn Tyr Asn His Ser Cys

1 5 10 15

Ser Ser Ser Ile Arg Leu Glu Lys Thr Arg Phe Pro Ser Gly Leu Gly
20 25 30

Ala Phe Ser Ser Ser Arg Glu Thr His Gln Pro Ser Ala Cys Val Ala 35 40 45

Cys Ala Pro Gly Ala Phe Leu Leu Ile Arg Ser Met Ile Ser Ala Trp
50 55 60

Leu Gln Gly Pro Ala Lys Ser Val Arg Glu Pro Pro Asn Gly Ala Arg 65 70 75 80

Ser Arg Arg Ile Ser Arg Ser Glu Thr Ser Leu Ser Pro His Leu Leu

85 90 95

Thr Gly Asn Leu Gly Gly Phe Gln Leu Met Phe Phe Ser Pro 100 105 110

<210> 3272

<211> 332

<212> PRT

<213> Homo sapiens

<400> 3272

Met Ala Thr Ile Lys Ser Glu Leu Ile Lys Asn Phe Ala Glu Glu Glu

1 5 10 15

Ala Ile His His Asn Lys Ile Ser Ile Val Gly Thr Gly Ser Val Gly

20 25 30

Val Ala Cys Ala Ile Ser Ile Leu Leu Lys Gly Leu Ser Asp Glu Leu

35 40 45

Val Leu Val Asp Val Asp Glu Gly Lys Leu Lys Gly Glu Thr Met Asp

50 55 60

Leu Gln His Gly Ser Pro Phe Met Lys Met Pro Asn Ile Val Ser Ser

65 70 75 80

Lys Asp Tyr Leu Val Thr Ala Asn Ser Asn Leu Val Ile Ile Thr Ala

85 90 95

Gly Ala Arg Gln Lys Lys Gly Glu Thr Arg Leu Asp Leu Val Gln Arg

100 105 110

Asn Val Ser Ile Phe Lys Leu Met Ile Pro Asn Ile Thr Gln Tyr Ser

115 120 125

Pro His Cys Lys Leu Leu Ile Val Thr Asn Pro Val Asp Ile Leu Thr

130 135 140

Tyr Val Ala Trp Lys Leu Ser Gly Phe Pro Lys Asn Arg Val Ile Gly Ser Gly Cys Asn Leu Asp Ser Ala Arg Phe Arg Tyr Phe Ile Gly Gln Arg Leu Gly Ile His Ser Glu Ser Cys His Gly Leu Ile Leu Gly Glu His Gly Asp Ser Ser Val Pro Val Trp Ser Gly Val Asn Ile Ala Gly Val Pro Leu Lys Asp Leu Asn Pro Asp Ile Gly Thr Asp Lys Asp Pro Glu Gln Trp Glu Asn Val His Lys Lys Val Ile Ser Ser Gly Tyr Glu Met Val Lys Met Lys Gly Tyr Thr Ser Trp Gly Ile Ser Leu Ser Val Ala Asp Leu Thr Glu Ser Ile Leu Lys Asn Leu Arg Arg Val His Pro Val Ser Thr Leu Ser Lys Gly Leu Tyr Gly Ile Asn Glu Asp Ile Phe Leu Ser Val Pro Cys Ile Leu Gly Glu Asn Gly Ile Thr Asp Leu Ile Lys Val Lys Leu Thr Leu Glu Glu Glu Ala Cys Leu Gln Lys Ser Ala Glu Thr Leu Trp Glu Ile Gln Lys Glu Leu Lys Leu

<210> 3273

<211> 188

<212> PRT

<213> Homo sapiens

<400> 3273

Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg

1 5 10 15

Val Ala Asn Glu Leu Asn Ala Arg Arg Ser Phe Thr Ala Ala Asp

20 25 30

Ser Lys Asp Glu Glu Val Lys Val Ala Pro Arg Arg Ser Phe Leu Asp

35 40 45

Phe Asp Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val

50 55 60

Gln Cys Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu

65 70 75 80

Ser Ile Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val

85 90 95

Leu Thr Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg

100 105 110

His Gln Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr

115 120 125

Ser Gly Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro

130 135 140

Leu Gln Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala

145 150 155 160

Ile Leu Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala

165 170 175

Pro His Ala Val His Pro Thr Gly Thr Lys Ala Leu

180 185

<210> 3274

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3274

Met Phe Phe Phe Val Glu Met Gly Phe Tyr His Val Gly Gln Ala Gly

1 5 10 15

Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Thr Ser Ala Ser Gln Ser

20 25 30

Ala Gly Ile Thr Gly Val Ser His Tyr Ala Arg Pro Ala Ala Gly

35 40 45

Phe Thr Asn Phe Leu Pro Thr Ala Gly Ala Thr Phe Tyr Ser Lys Glu

50 55 60

Arg Asn Ser Asp His Cys Leu Cys Ser Leu Gly Phe Phe Pro Thr Leu

65 70 75 80

Ser Asn Gly Ile His Gln Phe His Ser Arg Met Ser Ser Leu Val Leu

85 90 95

Gly Leu Glu Asn Trp Ala Trp Leu Met Asp

100 105

<210> 3275

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3275

Met Glu Leu Ala Ile Trp Tyr Val Gln Gln Pro Ser Leu Arg Ile Ala

Lys Cys Ile Gly Asn Ile Phe Gln Ala Val Thr Pro Val Thr Ser Lys Gln Arg Ser Cys Leu Cys Leu Leu Ala Leu Ala Tyr Ala Lys Gly Val Phe Asn Asn Phe Gly Phe Gln Leu Phe Thr Leu Trp Phe Gln Leu Arg Leu Gly Arg Asn Trp Pro Gln Asp Lys Val Thr Pro Glu Phe Gly Thr Lys Pro Gly Ala Lys Asp Ser Asp Gln Thr Ser Trp Ala Ser Gly Ser Ala Pro Arg Gly Leu Lys Pro Thr Arg Val Arg Phe Gly Ile Cys Arg Val <210> 3276 <211> 197 <212> PRT <213> Homo sapiens <400> 3276 Met Ala Pro Ala Ser Val Pro Ser Ser Leu Gln Gly Gly Leu Gly Ala Cys Leu Gly Arg Lys Glu Arg Arg Cys Arg Ser Ala Trp Gly Gly Cys Ser Arg Arg Trp Pro Gln Ala Gln Ala Pro Gln Gly Leu Phe Pro Pro

Ala Arg Pro Gly Arg Ala Ala Trp Trp Arg Val Arg Glu Asp Pro Gly Gly Gly Pro Ser Cys Lys Asn Trp Trp Gly Pro Arg Ser Pro Pro Ser Arg Gly Gly Leu Leu Pro Phe Gly Cys Cys Val Gln Ser Pro Val Ser Cys Ser Leu Arg Leu Tyr Pro Ala Ala Phe Pro Pro Ala Gly Glu Ala Arg Ala Ala Leu Cys Trp Pro Val Leu Pro Leu Pro Thr Arg Val Pro Trp Trp Ser Cys Arg Gly Ala His Val Thr Ser Leu Pro Thr Gly Val Arg Ala Gly Pro Gln Pro Glu Arg Glu Arg Pro Gln Ala Cys Ala Gly Gly Gly Asn Gly Gln Leu Arg Val Val Pro Gly Ala Leu His Ser Arg Gly Arg Gly Cys Val Arg Gly Val Arg Gly Ile Val Cys Pro Ala Ala Gly Thr Gln

<210> 3277

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3277

Met Ala Thr Val Gly Glu Arg Arg Pro Leu Pro Ser Pro Glu Val Met

Leu Gly Gln Ser Trp Asn Leu Trp Val Glu Ala Ser Lys Leu Pro Gly Lys Asp Gly Thr Glu Leu Asp Glu Ser Phe Lys Glu Phe Gly Lys Asn Arg Glu Val Met Gly Leu Cys Arg Glu Asp Met Pro Ile Phe Gly Phe Cys Pro Ala His Asp Asp Phe Tyr Leu Val Val Cys Asn Asp Cys Asn Gln Val Val Lys Pro Gln Ala Phe Gln Ser His Tyr Glu Arg Arg His Ser Ser Ser Ser Lys Pro Pro Leu Ala Val Pro Pro Thr Ser Val Phe Ser Phe Phe Pro Ser Leu Ser Lys Ser Lys Gly Gly Ser Ala Ser Gly Ser Asn Arg Ser Ser Ser Gly Gly Val Leu Ser Ala Ser Ser Ser Ser Ser Lys Leu Leu Lys His Pro Leu Thr Lys Asn Tyr Ser

<210> 3278

<211> 408

<212> PRT

<213> Homo sapiens

<400> 3278

Met Asn Leu Pro Arg Ala Glu Arg Pro Arg Ser Thr Pro Gln Arg Ser

1 5 10 15

Leu	Arg	Asp	Ser	Asp	Gly	Glu	Asp	Gly	Lys	Ile	Asp	Val	Leu	Gly	Glu
			20					25					30		
Glu	Glu	Asp	Glu	Asp	Glu	Val	Glu	Asp	Glu	Glu	Glu	Glu	Ala	Ser	Gln
		35					40					45			
Lys	Phe	Leu	Glu	Gln	Ser	Leu	Gln	Pro	Gly	Leu	Gln	Val	Ala	Arg	Trp
	50					55					60				
Gly	Gly	Val	Ala	Leu	Pro	Arg	Glu	His	Ile	Glu	Gly	Gly	Gly	Pro	Ser
65					70					75					80
Asp	Pro	Ser	Glu	Phe	Gly	Thr	Glu	Phe	Arg	Ala	Pro	Pro	Arg	Ser	Ala
				85					90					95	
Ala	Ala	Ser	Glu	Asp	Ala	Arg	Gln	Pro	Ala	Lys	Pro	Pro	Tyr	Ser	Tyr
			100					105					110		
Ile	Ala	Leu	Ile	Thr	Met	Ala	Ile	Leu	Gln	Ser	Pro	His	Lys	Arg	Leu
		115					120					125			
Thr	Leu	Ser	Gly	Ile	Cys	Ala	Phe	Ile	Ser	Gly	Arg	Phe	Pro	Tyr	Tyr
	130					135					140				
Arg	Arg	Lys	Phe	Pro	Ala	Trp	Gln	Asn	Ser	Ile	Arg	His	Asn	Leu	Ser
145					150					155					160
Leu	Asn	Asp	Cys	Phe	Val	Lys	Ile	Pro	Arg	Glu	Pro	Gly	His	Pro	Gly
				165					170					175	
Lys	Gly	Thr	Tyr	Trp	Ser	Leu	Asp	Pro	Ala	Ser	Gln	Asp	Met	Phe	Asp
			180					185					190		
Asn	Gly	Ser	Phe	Leu	Arg	Arg	Arg	Lys	Arg	Phe	Lys	Arg	His	Gln	Leu
		195					200					205			
Thr	Pro	Gly	Ala	His	Leu	Pro	His	Pro	Phe	Pro	Leu	Pro	Ala	Ala	His
	210					215					220				
Ala	Ala	Leu	His	Asn	Pro	Arg	Pro	Gly	Pro	Leu	Leu	Gly	Ala	Pro	Ala
225					230					235					240
Leu	Pro	Gln	Pro	Val	Pro	Gly	Ala	Tyr	Pro	Asn	Thr	Ala	Pro	Gly	Arg

Arg Pro Tyr Ala Leu Leu His Pro His Pro Pro Arg Tyr Leu Leu Leu Ser Ala Pro Ala Tyr Ala Gly Ala Pro Lys Lys Ala Glu Gly Ala Asp Leu Ala Thr Pro Gly Thr Leu Pro Val Leu Gln Pro Ser Leu Gly Pro Gln Pro Trp Glu Glu Gly Lys Gly Leu Ala Ser Pro Pro Gly Gly Gly Cys Ile Ser Phe Ser Ile Glu Ser Ile Met Gln Gly Val Arg Gly Ala Gly Thr Gly Ala Ala Gln Ser Leu Ser Pro Thr Ala Trp Ser Tyr Cys Pro Leu Leu Gln Arg Pro Ser Ser Leu Ser Asp Asn Phe Ala Ala Thr Ala Ala Ala Ser Gly Gly Gly Leu Arg Gln Arg Leu Arg Ser His Gln Gly Arg Gly Ala Gly Arg Ala Pro Val Gly Arg Val Gly Ala Ala Ala Val Ser Gly Gly Gly Arg Gly Leu

<210> 3279

<211> 324

<212> PRT

<213> Homo sapiens

<400> 3279

Met	Gly	Asp	Leu	Leu	Pro	Arg	Ala	Trp	Pro	Gly	Ala	Gly	Cys	Thr	Glu
1				5					10					15	
Thr	Gln	Thr	Thr	Ser	Gln	Gly	Pro	Gln	Glu	Leu	Ala	Val	Pro	Thr	Ala
			20					25					30		
Glu	Cys	Tyr	Ser	Cys	Ser	Phe	Tyr	Phe	Cys	Val	Cys	Pro	Glu	Ala	Leu
		35					40					45			
Pro	Gln	Glu	Glu	Gln	Glu	Gly	Ser	Gly	Ser	Glu	Glu	Arg	Gly	Glu	Glu
	50					55					60				
Lys	Gly	Thr	Ser	Ser	Pro	Asp	Tyr	Arg	His	Tyr	Leu	Arg	Met	Trp	Ala
65					70					75					80
Lys	Glu	Lys	Glu	Ala	Gln	Lys	Glu	Thr	Ile	Lys	Asp	Leu	Pro	Lys	Met
				85					90					95	
Asn	Gln	Glu	Gln	Phe	Ile	Glu	Leu	Cys	Lys	Thr	Leu	Tyr	Asn	Met	Phe
			100					105					110		
Ser	Glu	Asp	Pro	Met	Glu	Gln	Asp	Leu	Tyr	His	Ala	Ile	Ala	Thr	Val
		115					120					125			
Ala	Ser	Leu	Leu	Leu	Arg	Ile	Gly	Glu	Val	Gly	Lys	Lys	Phe	Ser	Ala
	130					135					140				
Arg	Thr	Gly	Arg	Lys	Pro	Arg	Asp	Cys	Ala	Thr	Gly	Glu	Asp	Glu	Pro
145					150					155					160
Pro	Ala	Pro	Glu	Leu	His	Gln	Asp	Ala	Ala	Arg	Glu	Leu	Gln	Pro	Pro
				165					170					175	
Ala	Ala	Gly	Asp	Pro	Gln	Ala	Lys	Ala	Gly	Gly	Asp	Thr	His	Leu	Gly
			180					185					190		
Thr	Ala	Pro	Gln	Glu	Ser	Gln	Val	Val	Val	Glu	Gly	Gly	Ser	Gly	Glu
		195					200					205			
Gly	Gln	Gly	Ser	Pro	Ser	Gln	Leu	Leu	Ser	Asp	Asp	Glu	Thr	Lys	Asp
	210					215					220				
Acn	Met	Ser	Met	Ser	Sar	Tur	Sar	$V_{2}1$	Val	Sar	Thr	G137	Sar	I AII	Cln

225 -Cys Glu Asp Leu Ala Asp Asp Thr Val Leu Val Gly Gly Glu Ala Cys Ser Ser Thr Ala Arg Ile Gly Gly Thr Val Asp Thr Asp Trp Cys Ile Ser Phe Glu Gln Ile Leu Ala Ser Ile Leu Thr Glu Ser Val Leu Val Asn Phe Phe Glu Lys Arg Val Asp Ile Gly Leu Lys Ile Lys Asp Gln Lys Lys Val Glu Arg Gln Phe Ser Thr Ala Ser Asp His Glu Gln Pro

<210> 3280

Gly Val Ser Gly

<211> 233

<212> PRT

<213> Homo sapiens

<400> 3280

Met Phe His Arg Thr Pro Pro Arg Arg Ser Phe Pro Asn Pro Ser Trp Lys Gly Pro Gly Ser Lys Gly His Gln Ser Cys Leu Ser Asp Gln Leu Ala Val Ser Ser Gly Cys Trp Pro Glu Thr Ala Leu Ala Leu Ser Lys Val Thr Val His Cys Leu Ala Ile Ala Ser Leu Ser Gly Pro Ala Leu

Gly Leu Val Arg Leu Leu Gln His Pro Trp Leu Phe Pro Trp Gln Cys Asp Tyr Pro Ala Leu Thr Gln Ser Lys Gly Val Pro Leu Ser Trp Val Lys Phe Thr Arg Arg Leu Leu Lys Cys Leu Leu Arg Gly Asn Leu Cys Leu Ser Gln Cys Ile Ser Leu Leu Ser Phe Thr Phe Pro Phe Phe Leu Ser Lys Asn Asn Val Leu Val Glu Ala Leu Val Thr Leu Ile Asn Gln Asn Leu Pro Phe Pro Val Ser Leu Phe Leu Arg Pro Phe His Pro His Tyr Leu Leu Pro Arg Asn Met Thr Asp His Gln Asp Ala Ala Arg Arg Glu Asp Leu Ser Gln Lys Pro Thr Ser Lys Met Gly Gly Arg Cys Gly Leu Arg Ser Ser Ala Met His Pro Lys Pro Leu Thr Phe Pro Leu Trp Lys Cys Thr Gly

<210> 3281

<211> 176

<212> PRT

<213> Homo sapiens

<400> 3281

Met Ala Ala Val Glu Lys Arg Arg Gln Ala Val Pro Pro Pro Ala Gly

1 5 10 15

Phe Thr Asp Ser Gly Arg Gln Ser Val Ser Arg Ala Ala Gly Ala Ala
20 25 30

Glu Ser Glu Glu Asp Phe Leu Arg Gln Val Gly Val Thr Glu Met Leu 35 40 45

Arg Ala Ala Leu Leu Lys Val Leu Glu Ala Arg Pro Glu Glu Pro Ile 50 55 60

Ala Phe Leu Ala His Tyr Phe Glu Asn Met Gly Leu Arg Ser Pro Val 65 70 75 80

Asn Gly Gly Ala Gly Glu Pro Pro Gly Gln Leu Leu Gln Gln Gln
85 . 90 . 95

Arg Leu Gly Arg Ala Leu Trp His Leu Arg Leu Ala His His Ser Arg
100 105 110

Arg Cys Ala Val Gly Arg Leu Gly Arg Val Gly Gln Arg Trp Thr Ser 115 120 125

Thr Pro Ser Met Pro Arg Ala Ala Pro Tyr Pro Gln Arg Arg Arg 130 135 140

165 170 175

<210> 3282

<211> 924

<212> PRT

<213> Homo sapiens

<400> 3282 Met Ile Ser Gln Thr Gln Ser Leu Gly Gly Pro Pro Leu Glu His Glu Val Pro Gly His Pro Pro Gly Gly Asp Met Gly Gln Gln Met Asn Met Met Ile Gln Arg Leu Gly Gln Asp Ser Leu Thr Pro Glu Gln Val Ala Trp Arg Lys Leu Gln Glu Glu Tyr Tyr Glu Glu Lys Arg Arg Lys Glu Glu Gln Ile Gly Leu His Gly Ser Arg Pro Leu Gln Asp Met Met Gly Met Gly Gly Met Met Val Arg Gly Pro Pro Pro Pro Tyr His Ser Lys Pro Gly Asp Gln Trp Pro Pro Gly Met Gly Ala Gln Leu Arg Gly Pro Met Asp Val Gln Asp Pro Met Gln Leu Arg Gly Gly Pro Pro Phe Pro Gly Pro Arg Phe Pro Gly Asn Gln Ile Gln Arg Val Pro Gly Phe Gly Gly Met Gln Ser Met Pro Met Glu Val Pro Met Asn Ala Met Gln Arg Pro Val Arg Pro Gly Met Gly Trp Thr Glu Asp Leu Pro Pro Met Gly Gly Pro Ser Asn Phe Ala Gln Asn Thr Met Pro Tyr Pro Gly Gly Gln Gly Glu Ala Glu Arg Phe Met Thr Pro Arg Val Arg Glu Glu Leu Leu

Arg His Gln Leu Leu Glu Lys Arg Ser Met Gly Met Gln Arg Pro Leu

	210					215					220				
Gly	Met	Ala	Gly	Ser	Gly	Met	Gly	Gln	Ser	Met	Glu	Met	Glu	Arg	Met
225					230					235					240
Met	Gln	Ala	His	Arg	Gln	Met	Asp	Pro	Ala	Met	Phe	Pro	Gly	Gln	Met
				245					250					255	
Ala	Gly	Gly	Glu	Gly	Leu	Ala	Gly	Thr	Pro	Met	Gly	Met	Glu	Phe	Gly
			260					265					270		
Gly	Gly	Arg	Gly	Leu	Leu	Ser	Pro	Pro	Met	Gly	Gln	Ser	Gly	Leu	Arg
		275					280					285			
Glu	Val	Asp	Pro	Pro	Met	Gly	Pro	Gly	Asn	Leu	Asn	Met	Asn	Met	Asn
	290					295					300				
Val	Asn	Met	Asn	Met	Asn	Met	Asn	Leu	Asn	Val	Gln	Met	Thr	Pro	Gln
305					310					315					320
Gln	Gln	Met	Leu	Met	Ser	Gln	Lys	Met	Arg	Gly	Pro	Gly	Asp	Leu	Met
				325					330					335	
Gly	Pro	Gln	Gly	Leu	Ser	Pro	Glu	Glu	Met	Ala	Arg	Val	Arg	Ala	Gln
			340					345					350		
Asn	Ser	Ser	Gly	Val	Met	Gly	Gly	Pro	Gln	Lys	Met	Leu	Met	Pro	Ser
		355					360					365			
Gln	Phe	Pro	Asn	Gln	Gly	Gln	Gln	Gly	Phe	Ser	Gly	Gly	Gln	Gly	Pro
	370	,				375					380				
Tyr	Gln	Ala	Met	Ser	Gln	Asp	Met	Gly	Asn	Thr	Gln	Asp	Met	Phe	Ser
385					390					395					400
Pro	Asp	Gln	Ser		Met	Pro	Met	Ser		Val	Gly	Thr	Thr		Leu
				405					410					415	
Ser	His	Met		Leu	Pro	Pro	Ala		Asn	Pro	Pro	Gly		Val	His
_			420					425					430		
Ser	Ala		Asn	Arg	Gly	Leu		Arg	Arg	Pro	Ser		Leu	Thr	He
		435					440					445			

Ser	Ile	Asn	Gln	Met	Gly	Ser	Pro	Gly	Met	Gly	His	Leu	Lys	Ser	Pro
	450					455					460				
Thr	Leu	Ser	Gln	Val	His	Ser	Pro	Leu	Val	Thr	Ser	Pro	Ser	Ala	Asn
465					470					475					480
Leu	Lys	Ser	Pro	Gln	Thr	Pro	Ser	Gln	Met	Val	Pro	Leu	Pro	Ser	Ala
				485					490					495	
Asn	Pro	Pro	Gly	Pro	Leu	Lys	Ser	Pro	Gln	Val	Leu	Gly	Ser	Ser	Leu
			500					505					510		
Ser	Val	Arg	Ser	Pro	Thr	Gly	Ser	Pro	Ser	Arg	Leu	Lys	Ser	Pro	Ser
		515					520					525			
Met	Ala	Val	Pro	Ser	Pro	Gly	Trp	Val	Ala	Ser	Pro	Lys	Thr	Ala	Met
	530					535					540				
	Ser	Pro	Gly	Val		Gln	Asn	Lys	Gln		Pro	Leu	Asn	Met	
545					550					555			_	_	560
Ser	Ser	Thr	Thr		Ser	Asn	Met	Glu		Gly	Thr	Leu	Pro		Ser
	_		_	565	~	_		_	570			_	_	575	
Gly	Pro	Arg		Ser	Ser	Ser	Ala		Pro	Ala	Asn	Pro		Ser	Gly
			580 D	0			D.	585	0				590 D	m)	D.
Leu	Met		Pro	Ser	Leu	Pro		Thr	Ser	Ser	Pro		Pro	Inr	Pro
C	C1	595	D	т	C		600	M .	æı.	C 1	W.	605	T	T	A 1
Ser		Asn	Pro	Leu	Ser		met	Met	Inr	Gin	Met	Ser	Lys	lyr	АТА
Wo t	610 Pro	S	Com	Th	Desa	615	Т	п: -	۸	۸1.	620	T •••	TL	T1.	A 1 ~
	rro	ser	ser	ınr		Leu	ıyr	пIS	ASN		Ile	Lys	ınr	ше	
625	C^	۸	۸۵-	C1	630	Ī	Dwa	۸	۸ ~	635 Pro	I	I	Dwa	Deca	640 Pro
IIIr	ser	ASP	ASP		Leu	Leu	rro	ASP		rro	Leu	Leu	rro		110
D	D	D	C1-	645	S	C1	D	C1	650	C	۸	S	C1	655	Co.:
110	rro	rro		GIY	ser	GIY	110		116	ser	Asn	ser		110	ser
Gla	Mo+	и; с	660	Acr	Sor	Λ1 o	A 1 a	665	Cln	Sor	Pro	Mot	670	Mot	Acr
UIII	IVIC: I	1115	LCU	UOI	OC.	$\Lambda 12$	Λ I A	$\Lambda I \lambda I$	AT LIE	OC.	11()	IVIC	TI V	IVIC: I	4511

		675					680					685			
Leu	Pro	Gly	Gln	Gln	Pro	Leu	Ser	His	Glu	Pro	Pro	Pro	Ala	Met	Leu
	690					695					700				
Pro	Ser	Pro	Thr	Pro	Leu	Gly	Ser	Asn	Ile	Pro	Leu	His	Pro	Asn	Ala
705					710					715					720
Gln	Gly	Thr	Gly	Gly	Pro	Pro	Gln	Asn	Ser	Met	Met	Met	Ala	Pro	Gly
				725					730					735	
Gly	Pro	Asp	Ser	Leu	Asn	Ala	Pro	Cys	Gly	Pro	Val	Pro	Ser	Ser	Ser
			740					745					750		
Gln	Met	Met	Pro	Phe	Pro	Pro	Arg	Leu	Gln	Gln	Pro	His	Gly	Ala	Met
		755					760					765			
Ala	Pro	Thr	Gly	Gly	Gly	Gly	Gly	Gly	Pro	Gly	Leu	Gln	Gln	His	Tyr
	770					775					780				
Pro	Ser	Gly	Met	Ala	Leu	Pro	Pro	Glu	Asp	Leu	Pro	Asn	Gln	Pro	Pro
785					790					795					800
Gly	Pro	Met	Pro	Pro	Gln	Gln	His	Leu	Met	Gly	Lys	Ala	Met	Ala	Gly
				805					810					815	
Arg	Met	Gly	Asp	Ala	Tyr	Pro	Pro	Gly	Val	Leu	Pro	Gly	Val	Ala	Ser
			820					825					830		
Val	Leu	Asn	Asp	Pro	Glu	Leu	Ser	Glu	Val	Ile	Arg	Pro	Thr	Pro	Thr
		835					840					845			
Gly	Ile	Pro	Glu	Phe	Asp	Leu	Ser	Arg	Ile	Ile	Pro	Ser	Trp	Phe	Leu
	850					855					860				
Arg	Thr	Arg	Pro	Phe	Ser	Phe	Cys	Leu	Tyr	Leu	Leu	Arg	Ile	Leu	Ser
865					870					875					880
Leu	Leu	Met	Trp	Leu	Thr	Pro	Leu	Pro	Pro	Leu	Pro	Ala	Gly	Gly	Trp
				885					890					895	
Pro	Gly	Gly	Gln	Val	Pro	Ala	Gly	Ala	Val	Asn	Arg	Ala	Leu	Arg	Phe
			900					905					910		

Cys Ala Gly Leu Cys Val Cys Cys Ile Ser Val Phe 915 920

<210> 3283

<211> 428

<212> PRT

<213> Homo sapiens

<400> 3283

Met Ser Ser Gly Leu Arg Ala Ala Asp Phe Pro Arg Trp Lys Arg His

1 5 10 15

Ile Ser Glu Gln Leu Arg Arg Arg Asp Arg Leu Gln Arg Gln Ala Phe
20 25 30

Glu Glu Ile Ile Leu Gln Tyr Asn Lys Leu Leu Glu Lys Ser Asp Leu
35 40 45

His Ser Val Leu Ala Gln Lys Leu Gln Ala Glu Lys His Asp Val Pro 50 55 60

Asn Arg His Glu Ile Arg Arg Gln Ala Arg Leu Gln Lys Glu Leu 65 70 75 80

Ala Glu Ala Ala Lys Glu Pro Leu Pro Val Glu Gln Asp Asp Ile
85 90 95

Glu Val Ile Val Asp Glu Thr Ser Asp His Thr Glu Glu Thr Ser Pro

100 105 .110

Val Arg Ala Ile Ser Arg Ala Ala Thr Lys Arg Leu Ser Gln Pro Ala 115 120 125

Gly Gly Leu Leu Asp Ser Ile Thr Asn Ile Phe Gly Arg Arg Ser Val 130 135 140

Ser Ser Phe Pro Val Pro Gln Asp Asn Val Asp Thr His Pro Gly Ser

145					150					155					160
Gly	Lys	Glu	Val	Arg	Val	Pro	Ala	Thr	Ala	Leu	Cys	Val	Phe	Asp	Ala
				165					170					175	
His	Asp	Gly	Glu	Val	Asn	Ala	Val	Gln	Phe	Ser	Pro	Gly	Ile	Thr	Ser
			180					185					190		
Ile	Glu	Phe	Asp	Ser	Ala	Gly	Ser	Tyr	Leu	Leu	Ala	Ala	Ser	Asn	Asp
		195					200					205			
Phe	Ala	Ser	Arg	Ile	Trp	Thr	Val	Asp	Asp	Tyr	Arg	Leu	Arg	His	Thr
	210					215					220				
Leu	Thr	Gly	His	Ser	Gly	Lys	Val	Leu	Ser	Ala	Lys	Phe	Leu	Leu	Asp
225					230					235					240
Asn	Ala	Arg	Ile	Val	Ser	Gly	Ser	His	Asp	Arg	Thr	Leu	Lys	Leu	Trp
				245					250					255	
Asp	Leu	Arg	Ser	Lys	Val	Cys	Ile	Lys	Thr	Val	Phe	Ala	Gly	Ser	Ser
			260					265					270		
Cys	Asn	Asp	Ile	Val	Cys	Thr	Glu	Gln	Cys	Val	Met	Ser	Gly	His	Phe
		275					280					285			
Asp	Lys	Lys	Ile	Arg	Phe	Trp	Asp	Ile	Arg	Ser	Glu	Ser	Ile	Val	Arg
	290					295					300				
Glu	Met	Glu	Leu	Leu	Gly	Lys	Ile	Thr	Ala	Leu	Asp	Leu	Asn	Pro	Glu
305					310					315					320
Arg	Thr	Glu	Leu	Leu	Ser	Cys	Ser	Arg	Asp	Asp	Leu	Leu	Lys	Val	Ιlε
				325					330					335	
Asp	Leu	Arg	Thr	Asn	Ala	Ile	Lys	Gln	Thr	Phe	Ser	Ala	Pro	Gly	Phe
			340					345					350		
Lys	Cys	Gly	Ser	Asp	Trp	Thr	Arg	Val	Val	Phe	Ser	Pro	Asp	Gly	Ser
		355					360					365			
Tyr	Val	Ala	Ala	Gly	Ser	Ala	Glu	Gly	Ser	Leu	Tyr	Ile	Trp	Ser	Val
	370					375					380				

Leu Thr Gly Lys Val Glu Lys Val Leu Ser Lys Gln His Ser Ser Ser 385 390 395 400

Ile Asn Ala Val Ala Trp Ser Pro Ser Gly Ser His Val Val Ser Val 405 410 415

Asp Lys Gly Cys Lys Ala Val Leu Trp Ala Gln Tyr 420 425

<210> 3284

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3284

Met Arg Met Val Pro Met Glu Met Phe Asn Tyr Cys Ser Gln Leu Glu

1 5 10 15

Asp Glu Asn Ser Ser Ala Gly Leu Asp Ile Pro Gly Pro Pro Cys Thr
20 25 30

Lys Ala Ser Pro Glu Pro Ala Lys Pro Lys Pro Gly Ala Gln His Ser

35 40 45

Leu Pro Thr Glu Ala Glu Ala Pro Ala Gly Glu Arg Glu Ala Ser His
50 55 60

Gly His Gly Asp His Cys Arg Gly Arg Val Arg Arg Arg Leu His His
65 70 75 80

Asp Gly Gly Arg Cys Leu Trp Leu His Leu Arg Leu Pro His Gly
85 90 95

Gln Val Pro Pro Gly Ala Gln Lys Ala Pro Ala Pro Asp Gly Gly Pro
100 105 110

Arg Gly Arg Ala Arg Gly Pro Glu Ala Asp Leu Phe Cys Gly Leu Ser

115 120 125

Ala His Pro His Pro Ala Arg

130 135

<210> 3285

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3285

Met Glu His Phe Gly Ser Gly Leu Met Gly Glu Ser Pro Phe Ile Phe

1 5 10 15

Leu His Leu Gly Gln Leu His Ser Lys Glu Arg Asn Lys Gly His Val

20 25 30

Leu Pro Lys Ala Ser Gly Leu Thr Gly Gln Ser Gln Pro Phe Arg Glu

35 40 45

Gly Met Ser Pro Lys Glu Gly Ser Pro Phe Phe Pro Glu His Pro Pro

50 55 60

Leu Ser Ala Glu Leu Leu Leu Pro Thr His Pro Ser Thr Ile Ala Leu

65 70 75 80

Ser Thr Val Cys Pro Cys Gln Asn Pro Ser Pro Thr Cys Leu Ala Trp

85 90 95

Tyr Pro Ser Leu Gly Gly Arg Gln

100

<210> 3286

<211> 140

<212> PRT

<213> Homo sapiens

<400> 3286

Met Leu Gly Ile Ser Ala Ile Gly Gly Leu Cys Cys Leu His Arg Leu

1 5 10 15

Tyr Ser Cys Ile Pro Gly Glu Gly Gly Arg Ala Ala Lys Glu Lys Ser

20 25 30

Gln Ser Gln Gln Pro Ala Leu Arg Pro Ser Lys Leu Cys Thr Gly Gly

35 40 45

Leu Gly Ser Ala Leu Trp Ala Arg Gly Ala Gly Lys Arg Ala Gly Arg

50 55 60

Gly Thr Ala Ala Thr Ser Ala Arg Ala Ala Gln Glu Ala Pro Pro Tyr

65 70 75 80

Thr Ala Leu Gln Val Pro Gln Arg Glu Gln Pro Met Leu Pro Lys His

85 90 95

Pro Leu His Thr His Gln Gly Ser Trp Arg Arg Glu Val Pro Gln Gly

100 105 110

Lys Ala Pro Ser Pro Arg Arg Ala Ser Gly Pro Gly Leu Leu Trp Leu

115 120 125

Pro Thr Ala Ile Ile Ser Ile Tyr Arg Ala Gln Ser

130 135 140

<210> 3287

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3287

Met Ser Leu Leu Pro Asn Ser His Gln Ile Phe Leu Ile Glu Phe Leu

1 5 10 15

Val Leu Val Pro Asp Arg Thr Asn Asp Ser Pro Asn Leu Pro Val Phe

20 25 30

Met Arg Glu Lys Glu Lys Gly Ile Lys Gly Gly Arg Lys Lys Pro

35 40 45

Asn Ser Val Tyr Gly Glu Lys Gly Phe Cys Phe Ser Pro Asn Leu Gly

50 55 60

Gly Gly Arg Gly Gly Phe Ser Phe Tyr Phe Cys Phe Cys Phe Tyr Leu

65 70 75 80

Gly Phe Cys Phe Ser His Val Tyr Ser Ala Arg Ser Val Glu Gly Gly

85 90 95

Leu Gly Glu Gly Glu Leu Glu Lys Glu Leu Met Gly Ser Tyr Pro Gly

100 105 110

Leu

<210> 3288

<211> 209

<212> PRT

<213> Homo sapiens

<400> 3288

Met Lys Gly Gly Ala Gly Gly Ala Arg Pro Pro Pro Gly Arg Pro Val

1 5 10 15

Arg Ser Gly Ala Asn Ala Ile Pro Gly Pro Thr Ala Arg Gly Arg Cys

20 25 30

Gly Pro Pro Asn Pro Pro Pro Arg Pro Gly Trp Gly Gly Gly Ala Gly Gly Asp Gln Arg Leu Val Ser Leu Arg Ser Asp Leu Arg Gln Arg Gly Arg Asp Ile Met Thr Val Gly Ala Arg Leu Arg Ser Lys Ala Glu Ser Ser Leu Leu Arg Arg Gly Pro Arg Gly Arg Gly Arg Thr Glu Gly Asp Glu Glu Ala Ala Ile Leu Glu His Leu Glu Tyr Ala Asp Glu Ala Glu Ala Ala Ala Glu Ser Gly Thr Ser Ala Ala Asp Glu Arg Gly Pro Gly Thr Arg Gly Ala Arg Arg Val His Phe Ala Leu Leu Pro Glu Arg Tyr Glu Pro Leu Glu Glu Pro Ala Pro Ser Glu Gln Pro Arg Lys Arg Tyr Arg Arg Lys Leu Lys Lys Tyr Gly Lys Asn Val Gly Lys Val Ile Ile Lys Gly Cys Arg Tyr Val Val Ile Gly Leu Gln Gly Phe Ala Ala Ala Tyr Ser Ala Pro Phe Ala Val Ala Thr Ser Val Val Ser Phe Val Arg

<210> 3289

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3289

Met Lys Ala Trp Ser Asn Ala Met Trp Ser Ser Gly Lys Pro Gln Asn

1 5 10 15

Gly Val Ser Ser Trp Thr Ser Cys Ile Arg Val His Thr Pro Gln Gly

20 25 30

Leu Asn Pro Cys Pro Leu Ser Lys Glu Leu Gly Leu Asn Ala Val Arg

35 40 45

Asp Cys Leu Phe Val Val Ile Phe Ile Glu Arg Ser Ser Phe Pro Leu

50 55 60

Pro Pro Trp Leu Ser Gln Leu Val Val Ile Ala Asp Ser Phe Pro Glu

65 70 75 80

Arg Thr Phe Asn Arg Phe Lys Lys Asn Val Leu Asp Trp Val Pro Lys

85 90 95

Lys Gln Ser Leu Lys Gln Gly Phe Val Cys Lys

100 105

<210> 3290

<211> 357

<212> PRT

<213> Homo sapiens

<400> 3290

Met Leu Gln Gln Ile Leu His Asp Met Tyr Ile Asp Pro Glu Leu Leu

1 5 10 15

Ala Glu Leu Ser Asp Val Gln Lys His Ile Leu Phe Tyr Lys Met Arg

20 25 30

Glu	Glu	Gln	Leu	Arg	Arg	Trp	Lys	Glu	Arg	Glu	Thr	Trp	Glu	Ala	Leu
		35					40					45			
Ala	Gln	Asp	Glu	Gly	Leu	Arg	Pro	Pro	Lys	Thr	Lys	Arg	Ala	Ala	Ser
	50					55					60				
Asp	Lys	His	Ile	Gln	Trp	Leu	Leu	Gly	Ala	Asp	Gly	Glu	Val	Trp	Val
65					70					75					80
Trp	Ile	Met	Gly	Glu	Gly	Pro	Gly	Asp	Lys	Pro	Tyr	Glu	Glu	Ile	Ser
				85					90					95	
Glu	Glu	Leu	Ile	Ala	Glu	Arg	Ala	Arg	Leu	Gln	Ala	Gln	Arg	Glu	Ala
			100					105					110		
Glu	Glu	Leu	Trp	Arg	Gln	Lys	Glu	Ala	Glu	Ile	Thr	Lys	Lys	Phe	Arg
		115					120					125			
Asp	Ala	Leu	Ala	Asn	Glu	Lys	Ala	Arg	Ile	Leu	Ala	Glu	Lys	Trp	Lys
	130					135					140				
Val	Glu	Met	Glu	Gly	Arg	Lys	Ala	Ala	Lys	Val	Leu	Glu	Glu	Arg	Ile
145					150					155					160
His	Glu	Glu	Phe	Lys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Lys	Arg	Gly	Glu
				165					170					175	
Glu	Arg	Ile	Arg	Leu	Gln	Glu	Glu	Gln	Arg	Ala	Lys	Glu	Leu	Tyr	Trp
			180					185					190		
Thr	Leu	Lys	Gln	Ala	Gln	Leu	His	Cys	Gln	Ala	Ser	Glu	Lys	Glu	Glu
		195					200					205			
Arg	Glu	Trp	Glu	Glu	Gln	Leu	Arg	Arg	Ser	Lys	Ala	Ala	Asp	Glu	Glu
	210					215					220				
Arg	Ser	Arg	Arg	Ala	Gln	Arg	Ala	Arg	Asp	Glu	Tyr	Arg	His	His	Ser
225					230					235					240
Leu	Arg	Ala	Ile	Gln	Lys	Gly	Thr	Val	Ala	Gly	Leu	Ser	Ser	Met	Phe
				245					250					255	
Arg	Glu	Leu	Glv	Gln	Ser	His	Glu	Gln	Glu	Ala	Arg	Leu	Tyr	His	His

Leu Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Arg Thr Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg Leu Pro Ser Val Val <210> 3291 <211> 158 <212> PRT <213> Homo sapiens

<400> 3291 Met Gly Glu Ala Trp Phe Pro Glu Val Ala Pro Ser Leu Thr Ser Ser Leu Gly Trp Glu Trp Gly Phe Leu Trp Leu Cys Val Ala Pro Arg Gly Ala Val Ala Pro Ser Ser Phe Ser Leu Phe Ser Val Gly Arg Val Val Phe Leu Met Ser Pro Asn Ala Ser Thr Trp Ile Phe Gln Leu Lys Met

Leu Tyr Ser Leu Ala Ser Phe Val Pro Leu Cys Pro Phe Gly Ala Ser 65 70 75 80 Leu Leu Glu Phe Ala Gly Gly Pro Leu Leu Thr Leu Phe Ala Trp Val 85 90 95 Ser Pro Ala Glu Ala Ala Lys Gln Gln Arg Leu Leu Pro Val Leu Ser 100 105 110 Ser Arg Ser Phe Asp Pro Val Gly His Leu Ser Asp Ala Ser Gln Ser 125 115 120 Ser Pro Val Ser Gly Val Cys Arg Ser Lys Leu Glu Gly Ile Ser Gln 130 135 140 Ser Val Tyr Met Gly Ile Arg Asp Pro Leu Glu Glu Ala Asp 145 150 155

<210> 3292

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3292

Met Glu Met IIe Ala Phe Ala Arg IIe Phe Cys Lys Gly Gln Val Ser

1 5 10 15

Thr Ala Thr Phe Leu Glu Ser Cys Gly Val Ala Asp Leu IIe Thr Thr
20 25 30

Cys Tyr Gly Gly Arg Asn Arg Arg Val Ala Glu Ala Phe Ala Arg Thr
35 40 45

Gly Lys Thr Ile Glu Glu Leu Glu Lys Glu Met Leu Asn Gly Gln Lys
50 55 60

Leu Gln Gly Pro Gln Thr Ser Ala Glu Val Tyr Arg Ile Leu Lys Gln

Lys Gly Leu Leu Asp Lys Phe Pro Leu Phe Thr Ala Val Tyr Gln Ile Cys Tyr Glu Ser Arg Pro Val Gln Glu Met Leu Ser Cys Leu Gln Ser His Pro Glu His Thr <210> 3293 <211> 111 <212> PRT <213> Homo sapiens <400> 3293 Met Trp Ser Lys Gly Trp Ile Val Ile Ser Lys Glu Ile His Cys Leu Ile His Phe Lys Lys Gly Leu Thr Ser Gln Leu His Gly Met Arg Ser Ala Ala Ser Asn Cys Gln Leu Leu Gln Ser Leu Leu Gln Leu Gln Lys Asp Thr Val Leu Glu Val Ile Pro Phe Pro Cys Leu Val Thr Glu Val Gln Leu Asn Val Ala Ala Lys Val Thr Leu Met Pro Met Gly Ser Lys Lys Ser Lys Ser Leu Asn Arg Ile Leu Arg Asn Pro Lys Ser Val Phe Phe Gln His Met Thr Phe Trp Ser Ser Leu Leu Phe Ser Asn Arg

<210> 3294

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3294

Met Gly Cys Ser Pro Leu Ala Cys Ser Ser Thr Pro Leu His Pro Ser

1 5 10 15

Leu Ser Phe Gly Arg Ser Ala Ile Gln Ser Cys His Leu Phe Arg Met

20 25 30

Thr Phe Pro Phe Arg Ala Arg Cys Val Arg Phe Pro Gly Met Phe Pro

35 40 45

Ser Ser Pro Ser Ser Ser Trp Pro Gly Pro Ala Cys His Leu His Ala

50 55 60

Gly Val Cys Asp Cys Leu Val Leu Thr Arg Gly Val Gly Trp Trp Ser

65 70 75 80

Thr Ser Leu Gly Arg Gly Leu Ile Arg Pro Gly Val Ser Arg Phe His

85 90 95

Ala Leu Ser Ile Pro Asp His

100

<210> 3295

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3295

Met Val Tyr Ser Arg His Pro Lys Pro Val Ser Thr Ser His Lys Arg

1 5 10 15

His Val Ser His Arg Ala Gly Asn Pro Gly Pro Ser Pro Gly Thr Ser

20 25 30

Gly Pro Ile Ser Ala Pro Asp Leu Pro Cys Ser Leu Ala Trp Asp Leu

35 40 45

Ser Tyr Ser Trp Ala Val Asp His Val Pro Leu Pro Ala Leu Thr Cys

50 55 60

Pro Leu Thr Gly Asp Ser Glu Gly Pro His Leu Pro Arg Cys His Ser

65 70 75 80

Thr Trp His Leu Met Arg Lys Ala Thr Gln Arg Lys Gly Leu Tyr Ser

85 90 95

Ser Asp Phe Arg Gly Lys Thr Thr Gln Met Lys Gly Thr Thr Ile

100 105 110

<210> 3296

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3296

1

Met Gly Val Ala Arg Met Gly Ser His Gly Ser Val Arg Ala Glu Ala

5 10 15

Arg Phe Glu Leu Arg Pro Thr Pro Arg His Ser Ala Cys Tyr Pro Gly

20 25 30

Cys Pro Pro Pro Gly Cys His His Ala Arg Gly Ala Ala Ser Pro

35 40 45

Gly Arg Ser Asp His Tyr Phe His Ala Ser Cys Gly Asp Glu Gly Thr 55 60 50 Glu Ser His Arg Leu Arg Phe Gln Arg Arg Asn Leu Val Ser Glu Asn 70 75 65 80 Pro Ala Leu Arg Arg Ala Gly Ala Glu Arg Ser Arg His Trp Pro Glu 85 90 95 Gly Gly Leu Ser Thr Tyr Lys Pro Thr Glu Ala Ser Val Ser Val Val 100 105 110 Leu Phe Val Val Ser Gln Ala Leu Gly Ser Trp Leu Gly Val Arg Val 115 120 125 Arg Ser Ser Thr Cys Lys Gln Gly Cys Leu Pro Leu Ser Thr Leu Ala 130 135 140

<210> 3297

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3297

Met Thr Leu Ala Ser His Pro Arg Pro Glu Gly Leu His Ser Arg Gln

1 5 10 15

Trp Ser Gly Ser Gln Asp Ser Gln Met Gly Phe Pro Arg Ala Asp Pro

20 25 30

Ala Ser Asp Arg Ala Ser Leu Phe Val Ala Arg Thr Arg Arg Ser Asn 35 40 45

Ser Ser Glu Ala Leu Leu Val Asp Arg Ala Ala Gly Gly Gly Ala Gly
50 55 60

Ser Pro Pro Ala Pro Leu Ala Pro Ser Ala Ser Gly Pro Pro Val Cys

65					70					75					80
Lys	Ser	Ser	Glu	Val	Leu	Tyr	Glu	Arg	Pro	Gln	Pro	Thr	Pro	Ala	Phe
				85					90					95	
Ser	Ser	Arg	Thr	Ala	Gly	Pro	Pro	Asp	Pro	Pro	Arg	Ala	Ala	Arg	Pro
			100					105					110		
Ser	Ser	Ala	Ala	Pro	Ala	Ser	Arg	Gly	Ala	Pro	Arg	Leu	Pro	Pro	Val
		115					120					125			
Cys	Gly	Asp	Phe	Leu	Leu	Asp	Tyr	Ser	Leu	Asp	Arg	Gly	Leu	Pro	Arg
	130					135					140				
Ser	Gly	Gly	Gly	Thr	Gly	Trp	Gly	Glu	Leu	Pro	Pro	Ala	Ala	Glu	Val
145					150					155					160
Pro	Gly	Pro	Leu	Ser	Arg	Arg	Asp	Gly	Leu	Leu	Thr	Met	Leu	Pro	Gly
				165					170					175	
Pro	Pro	Pro	Val	Tyr	Ala	Ala	Asp	Ser	Asn	Ser	Pro	Leu	Leu	Arg	Thr
			180					185					190		
Lys	Asp	Pro	His	Thr	Arg	Ala	Thr	Arg	Thr	Lys	Pro	Cys	Gly	Leu	Pro
		195					200					205			
Pro	Glu	Ala	Ala	Glu	Gly	Pro	Glu	Val	His	Pro	Asn	Pro	Leu	Leu	Trp
	210					215					220				
Met	Pro	Pro	Pro	Thr	Arg	Ile	Pro	Ser	Ala	Gly	Glu	Arg	Ser	Gly	His
225					230					235					240
Lys	Asn	Leu	Ala	Leu	Glu	Gly	Leu	Arg	Asp	Trp	Tyr	Ile	Arg	Asn	Ser
				245					250					255	
Gly	Leu	Ala	Ala	Gly	Pro	Gln	Arg	Arg	Pro	Val	Leu	Pro	Ser	Val	Gly
			260					265					270		
Pro	Pro	His	Pro	Pro	Phe	Leu	His	Ala	Arg	Cys	Tyr	Glu	Val	Gly	Gln
		275					280					285			
Ala	Leu	Tyr	Gly	Ala	Pro	Ser	Gln	Ala	Pro	Leu	Pro	His	Ser	Arg	Ser
	290					295					300				

Phe Thr Ala Pro Pro Val Ser Gly Arg Tyr Gly Gly Cys Phe Tyr 305 310 315

<210> 3298

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3298

Met Ile Val Glu His Leu Ser Glu Pro Lys Ser Leu Gly Glu Cys Gly

1 5 10 15

Asp Phe Leu Glu Gly Gly Cys Arg Leu Pro Glu Ser Pro Pro Asn Gly

20 25 30

Arg Ala Glu Lys Gly Glu Gly Gly Gly Cys Ser Gln Glu Gly Ala

35 40 45

Arg Glu Glu Gln Gly Leu Gly Ala Ser Arg Asn Met Pro Ala Val Gly

50 55 60

Gly Arg Gly Arg Gly Ala Thr Val Asn Gly Phe Pro Ser Glu Val Val

65 70 75 80

Gly Ala Asp Gly Ser Phe Cys Leu Leu Ala Leu Lys Arg Val Phe Cys

85 90 95

Gln Gly His Ser Leu Phe Leu Leu Arg Lys His Pro Pro Asn Ala Asn

100 105 110

Asn Ile Pro Thr Ser Cys

115

<210> 3299

<211> 159

<212> PRT

<213> Homo sapiens

<400> 3299

Met Arg Arg Gly Ala Pro Arg Pro Gly Pro Pro Thr Pro Ala Leu Pro

1 5 10 . 15

Gly Pro Pro Leu Trp Ala Ser Val Ser Ile Pro Ala Pro Gly Lys Gly

20 25 30

Gly Arg Leu Glu Ser Arg Ser Arg Ala Arg Ser Pro Gly Val Pro Ala

35 40 45

Ala Ala Glu Cys Lys Val Ala Ala Phe Ser Leu Leu Arg Gly Ile Ser

50 55 60

Glu Ile Ser Gln Glu Gly Thr Phe Gly Arg Phe Trp Gly Gln Leu Gly

65 70 75 80

Ser Asn Arg Gly Ser Arg Thr Pro Lys Gly Glu Ser Pro Ala Ser Glu

85 90 95

Asp Gly Glu Glu Gly Gly Ala Leu Ala Lys Gly Ala Leu Pro Tyr Gln

100 105 110

Pro Gly Leu Leu Lys Arg Gly Asp Phe Glu Trp Val Thr Ser Pro Ala

115 120 125

Trp Ala Arg Ser Val Glu Gly Gly Pro Ala Gln Arg Val Asn Arg Leu

130 135 140

Glu Val Cys Asp Gln Gly Gln Pro Ala Val Arg Ala Cys Gly Arg

145 150 155

<210> 3300

<211> 461

<212> PRT

<213> Homo sapiens

<400> 3300

Met Gly Asp Arg Ser Gly Gln Gln Glu Arg Ser Val Pro His Ser Pro 1 5 10 15

Gly Ala Pro Val Gly Thr Ser Ala Ala Ala Val Asn Glu Leu Leu His
20 25 30

Asn Gly Phe His Pro Pro Pro Val Gln Pro Pro His Val Cys Ser Arg
35 40 45

Gly Pro Val Gly Gly Ser Asp Ala Ala Pro Gln Arg Leu Pro Leu Leu 50 55 60

Pro Glu Leu Gln Pro Gln Pro Leu Leu Pro Gln His Asp Ser Pro Ala
65 70 75 80

Lys Lys Cys Arg Leu Arg Arg Met Asp Ser Gly Arg Lys Asn Arg

85

90

95

Pro Pro Phe Pro Trp Phe Gly Met Asp Ile Gly Gly Thr Leu Val Lys
100 105 110

Leu Val Tyr Phe Glu Pro Lys Asp Ile Thr Ala Glu Glu Glu Glu Glu Il5 120 125

Glu Val Glu Asn Leu Lys Ser Ile Arg Lys Tyr Leu Thr Ser Asn Thr
130 135 140

Ala Tyr Gly Lys Thr Gly Ile Arg Asp Val His Leu Glu Leu Lys Asn 145 150 155 160

Leu Thr Met Cys Gly Arg Lys Gly Asn Leu His Phe Ile Arg Phe Pro
165 170 175

Ser Cys Ala Met His Arg Phe Ile Gln Met Gly Ser Glu Lys Asn Phe 180 185 190

Ser Ser Leu His Thr Thr Leu Cys Ala Thr Gly Gly Gly Ala Phe Lys

195		200	205	
Phe Glu Glu Asp	Phe Arg Met	Ile Ala Asp	Leu Gln Leu l	His Lys Leu
210	215		220	
Asp Glu Leu Asp	Cys Leu Ile	Gln Gly Leu	Leu Tyr Val	Asp Ser Val
225	230		235	240
Gly Phe Asn Gly	Lys Pro Glu	Cys Tyr Tyr	Phe Glu Asn	Pro Thr Asn
	245	250		255
Pro Glu Leu Cys	Gln Lys Lys	Pro Tyr Cys	Leu Asp Asn	Pro Tyr Pro
260		265		270
Met Leu Leu Val	Asn Met Gly	Ser Gly Val	Ser Ile Leu	Ala Val Tyr
275		280	285	
Ser Lys Asp Asn	Tyr Lys Arg	Val Thr Gly	Thr Ser Leu	Gly Gly Gly
290	295		300	
Thr Phe Leu Gly	Leu Cys Cys	Leu Leu Thr	Gly Cys Glu	Thr Phe Glu
305	310		315	320
Glu Ala Leu Glu	Met Ala Ala	Lys Gly Asp	Ser Thr Asn	Val Asp Lys
	325	330		335
Leu Val Lys Asp	Ile Tyr Gly	Gly Asp Tyr	Glu Arg Phe	Gly Leu Gln
340		345		350
Gly Ser Ala Val	Ala Ser Ser	Phe Gly Asn	Met Met Ser	Lys Glu Lys
355		360	365	
Arg Asp Ser Ile	Ser Lys Glu	Asp Leu Ala	Arg Ala Thr	Leu Val Thr
370	375		380	
Ile Thr Asn Asn	Ile Gly Ser	Ile Ala Arg	Met Cys Ala	Leu Asn Glu
385	390		395	400
Asn Ile Asp Arg	Val Val Phe	Val Gly Asn	Phe Leu Arg	Ile Asn Met
	405	410		· 415
Val Ser Met Lys	Leu Leu Ala	Tyr Ala Met	Asp Phe Trp	Ser Lys Gly
420		425		430

Gln Leu Lys Ala Leu Phe Leu Glu His Glu Gly Tyr Phe Gly Ala Val 435 440 445 Gly Ala Leu Leu Glu Leu Phe Lys Met Thr Asp Asp Lys 450 455 460

<210> 3301

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3301

Met Thr Val Leu His Tyr Leu Asp Ser Ala Gln Glu Ala Thr Met Met

1 5 10 15

Tyr Gln Tyr Ser Gln His Leu Asp Asp Val Thr Leu Leu Cys Leu Gly
20 25 30

Pro Val Tyr Ile Val Tyr Glu Thr Tyr Val Trp Val His His Leu Val
35 40 45

Asp Val Thr Leu Leu His Gly Leu Cys Pro Trp Arg Cys Glu Ile Phe
50 55 60

Phe His Ser Ser Pro Ala IIe Ser Leu Leu Cys Leu Phe Cys Leu Gly
65 70 75 80

Leu Ala Lys Lys Arg Ile Ile Val Tyr His Trp Thr Gln Asn Leu Gly
85 90 95

Glu Val Thr Pro Ile Leu Pro Gly Ala His Ile Phe Gly Tyr Cys Asp

100 105 110

Ile Gly Asp Gly Trp Glu Ala His Glu Trp Ala Leu Leu Thr Glu Gly
115 120 125

Leu Val Thr Ser Gln His Ser Leu Pro Arg Lys Cys Asp Tyr Cys Leu

130 135 140

Pro Phe Ala Pro Cys Leu Gln Gly Arg Leu

145 150

<210> 3302

<211> 183

<212> PRT

<213> Homo sapiens

<400> 3302

Met Ala His Cys Ser Leu Asn Leu Leu Gly Ser Asn Lys Pro Pro Thr

1 5 10 15

Leu Ala Ser Gln Val Ala Gly Thr Ile Gly Thr His His Val Arg

20 25 30

Pro Ile Phe Val Phe Phe Lys Glu Thr Gly Cys His Cys Val Ala Gln

35 40 45

Ala Gly Leu Gln Leu Leu Gly Ser Ser Asn Leu Ser Ala Leu Val Ser

50 55 60

Gln Thr Ala Gly Ser Ile Val Val Asn Gln Arg Ala Gln Pro Pro Ser

65 70 75 80

Leu Ser Val Ser Val Phe Leu Cys Ser Ser Leu Ser Leu Leu Phe Leu

85 90 95

Ser Leu Pro Ile Ser Leu Ser Phe Leu Ser Val Ser Ala Ser Val Cys

100 105 110

Val Cys Phe Leu Ser Leu Phe Ser Val Cys Leu Cys Leu Pro Leu Pro

115 120 125

Val Ser Pro Leu Val Cys Ala Ser Leu Cys Leu Ser Leu Ala Leu Leu

130 135 140

180

<210> 3303

<211> 650

<212> PRT

<213> Homo sapiens

<400> 3303

Met Ala Arg Ser Pro Thr Thr His Pro Pro Ala Asn Thr Tyr Leu Pro

5 10 15

Gln Tyr Gly Gly Tyr Gly Ala Gly Gln Ser Val Phe Ala Pro Thr Lys
20 25 30

Pro Phe Thr Gly Gln Asp Cys Ala Asn Ser Lys Asp Cys Ser Phe Ala 35 40 45

Tyr Gly Ser Gly Asn Ser Leu Pro Ala Ser Pro Ser Ser Ala His Ser 50 55 60

Ala Gly Tyr Ala Pro Pro Pro Thr Gly Gly Pro Cys Leu Pro Pro Ser
65 70 75 80

Lys Ala Ser Phe Phe Ser Ser Ser Glu Gly Ala Pro Phe Ser Gly Ser 85 90 95

Ala Pro Thr Pro Leu Arg Cys Asp Ser Arg Ala Ser Thr Val Ser Pro 100 105 110

Gly Gly Tyr Met Val Pro Lys Gly Thr Thr Ala Ser Ala Thr Ser Ala

		115					120					125			
Ala	Ser	Ala	Ala	Ser	Ser	Ser	Ser	Ser	Ser	Phe	Gln	Pro	Ser	Pro	Glu
	130					135					140				
Asn	Cys	Arg	Gln	Phe	Ala	Gly	Ala	Ser	Gln	Trp	Pro	Phe	Arg	Gln	Gly
145					150					155					160
Tyr	Gly	Gly	Leu	Asp	Trp	Ala	Ser	Glu	Ala	Phe	Ser	Gln	Leu	Tyr	Asn
				165					170					175	
Pro	Ser	Phe	Asp	Cys	His	Val	Ser	Glu	Pro	Asn	Val	Ile	Leu	Asp	Ile
			180					185					190		
Ser	Asn	Tyr	Thr	Pro	Gln	Lys	Val	Lys	Gln	Gln	Thr	Ala	Val	Ser	Glu
		195					200					205			
Thr	Phe	Ser	Glu	Ser	Ser	Ser	Asp	Ser	Thr	Gln	Phe	Asn	Gln	Pro	Val
	210					215					220				
Gly	Gly	Gly	Gly	Phe	Arg	Arg	Ala	Asn	Ser	Glu	Ala	Ser	Ser	Ser	Glu
225					230					235					240
Gly	Gln	Ser	Ser	Leu	Ser	Ser	Leu	Glu	Lys	Leu	Met	Met	Asp	Trp	Asn
				245					250					255	
Glu	Ala	Ser	Ser	Ala	Pro	Gly	Tyr	Asn	Trp	Asn	Gln	Ser	Val	Leu	Phe
			260					265					270		
Gln	Ser	Ser	Ser	Lys	Pro	Gly	Arg	Gly	Arg	Arg	Lys	Lys	Val	Asp	Leu
		275					280					285			
Phe	Glu	Ala	Ser	His	Leu	Gly	Phe	Pro	Thr	Ser	Ala	Ser	Ala	Ala	Ala
	290					295					300				
Ser	Gly	Tyr	Pro	Ser	Lys	Arg	Ser	Thr	Gly	Pro	Arg	Gln	Pro	Arg	Gly
305					310					315					320
Gly	Arg	Gly	Gly	Gly	Ala	Cys	Ser	Ala	Lys	Lys	Glu	Arg	Gly	Gly	Ala
				325					330					335	
Ala	Ala	Lys	Ala	Lys	Phe	Ile	Pro	Lys	Pro	Gln	Pro	Val	Asn	Pro	Leu
			340					345					350		

Phe	Gln	Asp	Ser	Pro	Asp	Leu	Gly	Leu	Asp	Tyr	Tyr	Ser	Gly	Asp	Ser
		355					360					365			
Ser	Met	Ser	Pro	Leu	Pro	Ser	Gln	Ser	Arg	Ala	Phe	Gly	Val	Gly	Glu
	370					375					380				
Arg	Asp	Pro	Cys	Asp	Phe	Ile	Gly	Pro	Tyr	Ser	Met	Asn	Pro	Ser	Thr
385			٠		390					395					400
Pro	Ser	Asp	Gly	Thr	Phe	Gly	Gln	Gly	Phe	His	Cys	Asp	Ser	Pro	Ser
				405					410					415	
Leu	Gly	Ala	Pro	Glu	Leu	Asp	Gly	Lys	His	Phe	Pro	Pro	Leu	Ala	His
			420					425					430		
Pro	Pro	Thr	Val	Phe	Asp	Ala	Gly	Leu	Gln	Lys	Ala	Tyr	Ser	Pro	Thr
		435					440					445			
Cys	Ser	Pro	Thr	Leu	Gly	Phe	Lys	Glu	Glu	Leu	Arg	Pro	Pro	Pro	Thr
	450					455					460				
Lys	Leu	Ala	Ala	Cys	Glu	Pro	Leu	Lys	His	Gly	Leu	Gln	Gly	Ala	Ser
465					470					475					480
Leu	Gly	His	Ala	Ala	Ala	Ala	Gln	Ala	His	Leu	Ser	Cys	Arg	Asp	Leu
				485					490					495	
Pro	Leu	Gly	Gln	Pro	His	Tyr	Asp	Ser	Pro	Ser	Cys	Lys	Gly	Thr	Ala
			500					505					510		
Tyr	Trp	Tyr	Pro	Pro	Gly	Ser	Ala	Ala	Arg	Ser	Pro	Pro	Tyr	Glu	Gly
		515					520					525			
Lys	Val	Gly	Thr	Gly	Leu	Leu	Ala	Asp	Phe	Leu	Gly	Arg	Thr	Glu	Ala
	530					535					540				
Ala	Cys	Leu	Ser	Ala	Pro	His	Leu	Ala	Ser	Pro	Pro	Ala	Thr	Pro	Lys
545					550					555					560
Ala	Asp	Lys	Glu	Pro	Leu	Glu	Met	Ala	Arg	Pro	Pro	Gly	Pro	Pro	Arg
				565					570					575	
Gly	Pro	Ala	Ala	Ala	Ala	Ala	Gly	Tyr	Gly	Cys	Pro	Leu	Leu	Ser	Asp

580 585 590 Leu Thr Leu Ser Pro Val Pro Arg Asp Ser Leu Leu Pro Leu Gln Asp 600 595 605 Thr Ala Tyr Arg Tyr Pro Gly Phe Met Pro Gln Ala His Pro Gly Leu 615 620 610 Gly Gly Gly Pro Lys Ser Gly Phe Leu Gly Pro Met Ala Glu Pro His 630 635 640 625 Pro Glu Asp Thr Phe Thr Val Thr Ser Leu

650

<210> 3304

<211> 893

<212> PRT

<213> Homo sapiens

645

<400> 3304

Met Gly Arg Met Gly Lys Gly Cys Pro Ala Ser Gly Pro Arg Ser Trp

1 5 10 15

Leu Leu Ser Asp Glu Leu Val Gln Gly Ser Arg Ala Gly Val Ser Ala
20 25 30

Ser Phe Pro Val Gly Phe Arg Glu Gly Gly Gly Gly Gly Asp Phe Arg

45

Arg Gly Asp Val Gly Leu Gln Asp Gly Gly Val Arg Val Arg Val Ile
50 55 60

Ile Phe Ala Phe Ser Leu His Ser Leu Leu Ser Arg Phe Leu Pro Gly
65 70 75 80

Gly Asp Ala Ser Leu Met Glu Leu Glu Lys Arg Lys Glu Asn Arg Phe
85 90 95

Val	Glu	Arg	Gln	Ser	Ile	Val	Pro	Leu	Arg	Leu	Ile	Tyr	Arg	Ser	Gly
			100					105					110		
Gly	Glu	Asp	Glu	Ser	Arg	His	Asp	Ala	Leu	Asp	Thr	Arg	Val	Arg	Gly
		115					120					125			
Asp	Leu	Gly	Gly	Arg	Gln	Leu	Thr	His	Val	Asp	Gln	Ala	Ser	Phe	Gln
	130					135					140				
Val	Asp	Ala	Phe	Gly	Thr	Ser	Phe	Ile	Leu	Asp	Val	Val	Leu	Asn	His
145					150					155					160
Asp	Leu	Leu	Ser	Ser	Glu	Tyr	Ile	Glu	Arg	His	Ile	Glu	His	Gly	Gly
				165					170					175	
Lys	Thr	Val	Glu	Val	Lys	Gly	Gly	Glu	His	Cys	Tyr	Tyr	Gln	Gly	His
			180					185					190		
Ile	Arg	Gly	Asn	Pro	Asp	Ser	Phe	Val	Ala	Leu	Ser	Thr	Cys	His	Gly
		195					200					205			
Leu	His	Gly	Met	Phe	Tyr	Asp	Gly	Asn	His	Thr	Tyr	Leu	Ile	Glu	Pro
	210					215					220				
Glu	Glu	Asn	Asp	Thr	Thr	Gln	Glu	Asp	Phe	His	Phe	His	Ser	Val	Tyr
225					230					235					240
Lys	Ser	Arg	Leu	Phe	Glu	Phe	Ser	Leu	Asp	Asp	Leu	Pro	Ser	Glu	Phe
				245					250					255	
Gln	Gln	Val	Asn	Ile	Thr	Pro	Ser	Lys	Phe	Ile	Leu	Lys	Pro	Arg	Pro
			260					265					270		
Lys	Arg	Ser	Lys	Arg	Gln	Leu	Arg	Arg	Tyr	Pro	Arg	Asn	Val	Glu	Glu
		275					280					285			
Glu	Thr	Lys	Tyr	Ile	Glu	Leu	Met	Ile	Val	Asn	Asp	His	Leu	Met	Phe
	290					295					300				
Lys	Lys	His	Arg	Leu	Ser	Val	Val	His	Thr	Asn	Thr	Tyr	Ala	Lys	Ser
305					310					315					320
Val	Val	Asn	Met	Ala	Asp	Leu	Ile	Tyr	Lys	Asp	Gln	Leu	Lys	Thr	Arg

				325					330					335	
Ile	Val	Leu	Val	Ala	Met	Glu	Thr	Trp	Ala	Thr	Asp	Asn	Lys	Phe	Ala
			340					345					350		
Ile	Ser	Glu	Asn	Pro	Leu	Ile	Thr	Leu	Arg	Glu	Phe	Met	Lys	Tyr	Arg
		355					360					365			
Arg	Asp	Phe	Ile	Lys	Glu	Lys	Ser	Asp	Ala	Val	His	Leu	Phe	Ser	Gly
	370					375					380				
Ser	Gln	Phe	Glu	Ser	Ser	Arg	Ser	Gly	Ala	Ala	Tyr	Ile	Gly	Gly	Ile
385					390					395					400
Cys	Ser	Leu	Leu	Lys	Gly	Gly	Gly	Val	Asn	Glu	Phe	Gly	Lys	Thr	Asp
				405					410					415	
Leu	Met	Ala	Val	Thr	Leu	Ala	Gln	Ser	Leu	Ala	His	Asn	Ile	Gly	Ile
			420					425					430		
Ile	Ser	Asp	Lys	Arg	Lys	Leu	Ala	Ser	Gly	Glu	Cys	Lys	Cys	Glu	Asp
		435					440					445			
Thr	Trp	Ser	Gly	Cys	Ile	Met	Gly	Asp	Thr	Gly	Tyr	Tyr	Leu	Pro	Lys
	450					455					460				
Lys	Phe	Thr	Gln	Cys	Asn	Ile	Glu	Glu	Tyr	His	Asp	Phe	Leu	Asn	Ser
465					470					475					480
Gly	Gly	Gly	Ala	Cys	Leu	Phe	Asn	Lys	Pro	Ser	Lys	Leu	Leu	Asp	Pro
				485					490					495	
Pro	Glu	Cys	Gly	Asn	Gly	Phe	Ile	Glu	Thr	Gly	Glu	Glu	Cys	Asp	Cys
			500					505					510		
Gly	Thr	Pro	Ala	Glu	Cys	Val	Leu	Glu	Gly	Ala	Glu	Cys	Cys	Lys	Lys
		515					520					525			
Cys	Thr	Leu	Thr	Gln	Asp	Ser	Gln	Cys	Ser	Asp	Gly	Leu	Cys	Cys	Lys
	530					535					540				
Lys	Cys	Lys	Phe	Gln	Pro	Met	Gly	Thr	Val	Cys	Arg	Glu	Ala	Val	Asn
545					550					555					560

ı	Asp	Cys	Asp	Ile	Arg	Glu	Thr	Cys	Ser	Gly	Asn	Ser	Ser	Gln	Cys	Ala
					565					570					575	
]	Pro	Asn	Ile	His	Lys	Met	Asp	Gly	Tyr	Ser	Cys	Asp	Gly	Val	Gln	Gly
				580					585					590		
	Ile	Cys	Phe	Gly	Gly	Arg	Cys	Lys	Thr	Arg	Asp	Arg	Gln	Cys	Lys	Tyr
			595					600					605			
	Ile	Trp	Gly	Gln	Lys	Val	Thr	Ala	Ser	Asp	Lys	Tyr	Cys	Tyr	Glu	Lys
		610					615					620				
1	Leu	Asn	Ile	Glu	Gly	Thr	Glu	Lys	Gly	Asn	Cys	Gly	Lys	Asp	Lys	Asp
(625					630					635					640
,	Thr	Trp	Ile	Gln	Cys	Asn	Lys	Arg	Asp	Val	Leu	Cys	Gly	Tyr	Leu	Leu
					645					650					655	
(Cys	Thr	Asn	Ile	Gly	Asn	Ile	Pro	Arg	Leu	Gly	Glu	Leu	Asp	Gly	Glu
				660					665					670		
	Ile	Thr	Ser	Thr	Ļeu	Val	Val	Gln	Gln	Gly	Arg	Thr	Leu	Asn	Cys	Ser
			675					680					685			
(Gly	Gly	His	Val	Lys	Leu	Glu	Glu	Asp	Val	Asp	Leu	Gly	Tyr	Val	Glu
		690					695					700				
	Asp	Gly	Thr	Pro	Cys	Gly	Pro	Gln	Met	Met	Cys	Leu	Glu	His	Arg	Cys
	705					710					715					720
]	Leu	Pro	Val	Ala	Ser	Phe	Asn	Phe	Ser	Thr	Cys	Leu	Ser	Ser	Lys	Glu
					725					730					735	
(Gly	Thr	Ile	Cys	Ser	Gly	Asn	Gly	Val	Cys	Ser	Asn	Glu	Leu	Lys	Cys
				740					745					750		
1	Val	Cys	Asn	Arg	His	Trp	Ile	Gly	Ser	Asp	Cys	Asn	Thr	Tyr	Phe	Pro
			755					760					765			
]	His	Asn	Asp	Asp	Aļa	Lys	Thr	Gly	Ile	Thr	Leu	Ser	Gly	Asn	Gly	Val
		770					775					780				
	Ala	Glv	Thr	Asn	He	Πe	Ile	Glv	Πe	Tle	Ala	Glv	Thr	Πe	Ţ.eu	Val

Leu Ala Leu Ile Leu Gly Ile Thr Ala Trp Gly Tyr Lys Asn Tyr Arg Glu Gln Arg Gln Leu Pro Gln Gly Asp Tyr Val Lys Lys Pro Gly Gly Gly Asp Ser Phe Tyr Ser Asp Ile Pro Pro Gly Val Ser Thr Asn Ser Ala Ser Ser Ser Lys Lys Arg Ser Asn Gly Leu Ser His Ser Trp Ser Glu Arg Ile Pro Asp Thr Lys His Ile Ser Asp Ile Cys Glu Asn Gly Arg Pro Arg Ser Asn Ser Trp Gln Gly Asn Leu Gly Gly

<210> 3305

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3305

Met Phe Leu Gln Pro Ser Thr Pro Ser Ser Phe Ala Ser His Pro Ser Leu Leu Leu His Leu Phe Ser Tyr Ile His Tyr Gly Phe Pro Phe Gln Lys Ser Thr Ser Ser Leu Thr Phe Gly Asp Gly Gly Arg Val Pro Gln Ile Val Pro Asp Leu Ala Ser Glu Ser Pro Phe Glu Cys Leu Leu

Tyr Pro Ser Ile Phe Gly Ser Thr Pro Leu Ile Ser Asp Leu Thr Arg 80 65 70 75 Cys Ser Gly Pro Leu Gly Thr Ser His Gly Ser Val Phe Val Pro Gly 90 85 95 Ala Leu Val Pro Gly Thr Arg Cys Ala Tyr Cys Ser Trp Gly Val Phe 100 105 110 Ala Ser Cys Pro Ile Asp Asp 115 <210> 3306 <211> 208 <212> PRT <213> Homo sapiens <400> 3306

Met Ser His Pro Ala Trp Thr Pro Cys Arg Ala Ser Pro Lys Arg Gln

1 5 10 15

Trp Thr Gln Ala Gly Ser Ser Thr Cys Thr Pro Ala Leu Arg His Ala

20 25 30

Phe Ser Leu Asp Val Ala Ser Ala Trp Val Leu Pro Leu Arg Thr Ser 35 40 45

Arg Gly Ala Gly Gly Ala Ala Cys Cys His Pro His Trp Gly His Lys
50 55 60

Thr Ser Ala Val Glu Gly Ala Gln Ser Gln Leu His Pro Gly Pro Ser 65 70 75 80

Thr Ala Pro Arg Cys Gln Val Leu Leu Pro His Ser Pro Gly Pro Trp 85 90 95

Pro Ala Gly Ala Gly Ala Thr Pro Ala Trp Gly Pro Ala Glu Gly Gly

100 105 110 Trp Ala Ser Ser Gln Asp Pro Gln His Leu Leu Leu Glu Arg Gly Gly 120 115 125 Arg Ala Ser Asp Pro Val Pro Ala Arg Trp Glu Gln Asp Thr Asp Gly 130 135 140 Phe Val Leu Met Ala Asn Ala Ser Glu Met Asp Arg Gln Ser His Pro 145 150 155 160 Val Ala Phe Thr Val Thr Ile Leu Pro Val Asn Gly Gln Pro Pro Thr 165 170 175 Ser Tyr Lys Leu Arg Pro Ala Gly Ala Leu Asp Gly Gly Ile His Phe 180 185 190 Gly Leu Ser Asp Gly Glu His Thr Ser Ser Arg His Leu Ser Ser Glu 195 200 205

<210> 3307

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3307

Met Leu Thr Leu His Gly Ala Ser Ser Arg Phe Pro Gly Lys Ser Gly

1 5 10 15

Ser Arg Arg Ser Ser Leu Ile Ser Gln Pro Leu Trp Arg Glu Tyr
20 25 30

Gln Lys Gln Asp Glu Ser Gln Val Lys Ser Leu Ser Leu Gly Ser Pro

35 40 45

Lys Gly Gln Val Leu Thr Ser Gln Arg Pro Gly Pro Ala Gly Pro His

50 55 60

Gly Ser Thr Thr Pro Ser Arg Cys Pro Arg Pro Phe Val Ser His Pro 65 70 75 80

Ala Phe Ser Arg Ile Ser Lys Asp Ala Arg Leu Asp Pro Gln Ser Trp 85 90 95

Lys Thr Ala Val Pro Gly Ser His Gln Asn Gly Glu Ala Ser Ser Ser 100 105 110

His

<210> 3308

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3308

Met Lys Leu Arg Cys Tyr Leu Lys Leu Thr Ala Pro Asn Arg Pro Asp

1 5 10 15

Ser Gln Cys Pro Pro Arg Thr Ser Val Pro Ala Asp Leu Ala Ser Gly
20 25 30

Val Thr Ser Gly Glu Pro Phe Lys Ser Pro His Leu Ala Ser His Ser

35 40 45

Trp Pro Thr Leu Cys Ser Arg Ala Asn Gln Val Ala Asn Asp Lys Arg
50 55 60

Leu Ser Trp Pro Asn Ser Ser Leu Ala Trp Ile Thr Pro Ile Arg Cys
65 70 75 80

Gln Arg Cys Leu Leu Arg Trp Lys Asn Gln Ser Gly Ser Gly Val Arg 85 90 95

His Gln Gly Lys Gln Ala Asp Leu Glu Glu Ile Lys Tyr Ala Cys Ser

100 105 110

Leu Pro Ile Gln Val

115

<210> 3309

<211> 131

<212> PRT

<213> Homo sapiens

<400> 3309

Met Val Pro Arg Pro Leu Gln Thr Arg Val Pro Gly Cys Phe Ser Lys

1 5 10 15

Gly Cys Glu Gly Thr Gly Gln Arg Gly Trp Val Trp Gly Arg Glu His

20 25 30

Ile Asp Val Gly Ala His Ser Val Gly Thr Gly Arg Gln Leu Leu Cys

35 40 45

Gln Ala Phe Ile Phe Pro Ile Leu Tyr Met Arg Lys Leu Gly Ser Gly

50 55 60

Gly Glu Gly Cys Leu Ala Asp Val Trp Pro Gly Gly Gly Pro Gly

65 70 75 80

Leu Glu Pro Gln Ala Pro Pro Ser Ser Cys Lys Ser Pro Ala Gln Arg

85 90 95

Arg Gly Gly Ser Trp Gly Leu Ser Ser Leu Gln Asp Arg Val His Leu

100 105 110

Ser Ser Ser Ile Ile His Ser Phe Ile His Ser Phe Asn Lys Cys Leu

115 120 125

Ala Ser Gly

130

<210> 3310

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3310

Met Leu Ala Glu Trp Gly Ala Cys Leu Leu Leu Ala Val Ala Leu Leu

1 5 10 15

Gly Pro Gly Leu Gln Ala Gln Ala Met Glu Gly Val Lys Cys Gly Gly

20 25 30

Val Leu Ser Ala Pro Ser Gly Asn Phe Ser Ser Pro Asn Phe Pro Arg

35 40 45

Leu Tyr Pro Tyr Asn Thr Glu Cys Ser Trp Leu Ile Val Val Ala Glu

50 55 60

Gly Ser Ser Val Leu Leu Thr Phe His Ala. Phe Asp Leu Glu Tyr His

65 70 75 80

Asp Thr Cys Ser Phe Asp Phe Leu Glu Ile Tyr Asn Gly Ala Ser Pro

85 90 95

Asp Lys Gly Asn Leu Leu Gly Arg Phe Cys Gly Lys Val Pro Pro

100 105 110

Pro Phe Thr Ser Ser Trp His Val Met Ser Val Ile Phe His Ser Asp

115 120 125

Lys His Val Ala Ser His Gly Phe Ser Ala Gly Tyr Gln Lys Gly Gln

130 135 140

Arg Gly Ala Leu Gly Thr Cys Cys Ser Gly Ser His Leu

145 150 155

<210> 3311 <211> 630 <212> PRT <213> Homo sapiens <400> 3311 Met Lys Ile Gly Gln Gly Lys Tyr Glu Pro Gly Phe Phe Pro Lys Leu 1 5 10 15 Gln Ser Asp Val Leu Ser Thr Gly Pro Ala Ser Asn Lys Trp Thr Lys 20 25 30 Arg Asn Ala Pro Ala Gln Trp Arg Arg Lys Asp Arg Gln Lys Gln His 35 45 40 Thr Glu His Leu Arg Leu Asp Asn Asp Gln Arg Glu Lys Tyr Ile Gln 50 55 60 Glu Ala Arg Thr Met Gly Ser Thr Ile Arg Gln Pro Lys Leu Ser Asn 65 70 75 80 Leu Ser Pro Ser Val IIe Ala Gln Thr Asn Trp Lys Phe Val Glu Gly 85 90 95 Leu Leu Lys Glu Cys Arg Asn Lys Thr Lys Arg Met Leu Val Glu Lys

Gly Val Glu Glu Asn Thr Leu Ile Ala Ser Leu Cys Asp Leu Leu Glu
130 135 140

Arg Ile Trp Ser His Gly Leu Gln Val Lys Gln Gly Lys Ser Ala Leu

Met Gly Arg Glu Ala Val Glu Leu Gly His Gly Glu Val Asn Ile Thr

105

100

145

Trp Ser His Leu Leu His Tyr Gln Asp Asn Arg Gln Arg Lys Leu Thr
165 170 175

150

155

160

110

Ser	Gly	Ser	Leu	Ser	Thr	Ser	Gly	He	Leu	Leu	Asp	Ser	Glu	Arg	Arg
			180					185					190		
Lys	Ser	Asp	Ala	Ser	Ser	Leu	Met	Pro	Pro	Leu	Arg	Ile	Ser	Leu	Ile
		195					200					205			
Gln	Asp	Met	Arg	His	Ile	Gln	Asn	Ile	Gly	Glu	Ile	Lys	Thr	Asp	Val
	210					215					220				
Gly	Lys	Ala	Arg	Ala	Trp	Val	Arg	Leu	Ser	Met	Glu	Lys	Lys	Leu	Leu
225					230					235					240
Ser	Arg	His	Leu	Lys	Gln	Leu	Leu	Ser	Asp	His	Glu	Leu	Thr	Lys	Lys
				245					250					255	
Leu	Tyr	Lys	Arg	Tyr	Ala	Phe	Leu	Arg	Cys	Asp	Asp	Glu	Lys	Glu	Gln
			260					265					270		
Phe	Leu	Tyr	His	Leu	Leu	Ser	Phe	Asn	Ala	Val	Asp	Tyr	Phe	Cys	Phe
		275					280					285			
Thr	Asn	Val	Phe	Thr	Thr	Ile	Leu	Ile	Pro	Tyr	His	Ile	Leu	Ile	Val
	290					295					300				
Pro	Ser	Lys	Lys	Leu	Gly	Gly	Ser	Met	Phe	Thr	Ala	Asn	Pro	Trp	Ile
305					310					315					320
Cys	Ile	Ser	Gly	Glu	Leu	Gly	Glu	Thr	Gln	Ile	Met	Gln	Ile	Pro	Arg
				325					330					335	
Asn	Val	Leu	Glu	Met	Thr	Phe	Glu	Cys	Gln	Asn	Leu	Gly	Lys	Leu	Thr
			340					345					350		
Thr	Val	Gln	Ile	Gly	His	Asp	Asn	Ser	Gly	Leu	Tyr	Ala	Lys	Trp	Leu
		355					360					365			
Val	Glu	Tyr	Val	Met	Val	Arg	Asn	Glu	Ile	Thr	Gly	His	Thr	Tyr	Lys
	370					375					380				
Phe	Pro	Cys	Gly	Arg	Trp	Leu	Gly	Lys	Gly	Met	Asp	Asp	Gly	Ser	Leu
385					390					395					400
Glu	Arg	Ile	Leu	Val	Gly	Glu	Leu	Leu	Thr	Ser	Gln	Pro	Glu	Val	Asp

				405					410					415	
Glu	Arg	Pro	Cys	Arg	Thr	Pro	Pro	Leu	Gln	Gln	Ser	Pro	Ser	Val	Ile
			420					425					430		
Arg	Arg	Leu	Val	Thr	Ile	Ser	Pro	Asn	Asn	Lys	Pro	Lys	Leu	Asn	Thr
		435					440					445			
Gly	Gln	Ile	Gln	Glu	Ser	Ile	Gly	Glu	Ala	Val	Asn	Gly	Ile	Val	Lys
	450					455					460				
His	Phe	His	Lys	Pro	Glu	Lys	Glu	Arg	Gly	Ser	Leu	Thr	Leu	Leu	Leu
465					470					475					480
Cys	Gly	Glu	Cys	Gly	Leu	Val	Ser	Ala	Leu	Glu	Gln	Ala	Phe	Gln	His
				485					490					495	
Gly	Phe	Lys	Ser	Pro	Arg	Leu	Phe	Lys	Asn	Val	Phe	Ile	Trp	Asp	Phe
			500					505					510		
Leu	Glu	Lys	Ala	Gln	Thr	Tyr	Tyr	Glu	Thr	Leu	Glu	Lys	Asn	Glu	Val
		515					520					525			
Val	Pro	Glu	Glu	Asn	Trp	His	Thr	Arg	Ala	Arg	Asn	Phe	Cys	Arg	Phe
	530					535					540				
Val	Thr	Ala	Ile	Asn	Asn	Thr	Pro	Arg	Asn	Ile	Gly	Lys	Asp	Gly	Lys
545					550					555					560
Phe	Gln	Met	Leu	Val	Cys	Leu	Gly	Ala	Arg	Asp	His	Leu	Leu	His	His
				565					570					575	
Trp	Ile	Ala	Leu	Leu	Ala	Asp	Cys	Pro	Ile	Thr	Ala	His	Met	Tyr	Glu
-			580					585					590		
Asp	Val	Ala	Leu	Ile	Lys	Asp	His	Thr	Leu	Val	Asn	Ser	Leu	Ile	Arg
		595					600					605			
Val	Leu	Gln	Thr	Leu	Gln	Glu	Phe	Asn	Ile	Thr	Leu	Glu	Thr	Ser	Leu
	610					615					620				
Val	Lys	Gly	Ile	Asp	Ile										
625					630										

<210> 3312

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3312

Met Ser Arg Leu Ala Gly Gly Gln Ala Pro Tyr Leu Trp Glu Gln Gly

1 5 10 15

Phe Ala Gln Pro Pro Trp Asp Ala Leu Gly Leu Leu Thr Ala Gln Asp

20 25 30

Pro Ser Arg Glu Ala Ala Trp Ile Gly Gly Ser Gly Leu Thr Ala Gly

35 40 45

Leu Gly Leu Glu Pro Ser Pro Cys Pro Ala Gln Ala Pro Ala Glu Pro

50 55 60

Gly Ala Leu Ala Glu Ala Gly Leu Gly Ser Gly Ala Ala Arg Arg Pro

65 70 .75 80

Pro Ile Ser His Ser Leu Gly Val Leu Arg Val Thr Gln Arg Thr Val

85 90 95

Lys Cys Trp Ile

100

<210> 3313

<211> 635

<212> PRT

<213> Homo sapiens

<400> 3313 Met Ser Thr Cys Cys Trp Cys Thr Pro Gly Gly Ala Ser Thr Ile Asp Phe Leu Lys Arg Tyr Ala Ser Asn Thr Pro Ser Gly Glu Phe Gln Thr Ala Asp Glu Asp Leu Cys Tyr Cys Leu Glu Cys Val Ala Glu Tyr His Lys Ala Arg Asp Glu Leu Pro Phe Leu His Glu Val Leu Trp Glu Leu Glu Thr Leu Arg Leu Ile Asn His Phe Glu Lys Ser Met Lys Ala Glu Ile Gly Asp Asp Glu Leu Tyr Ile Val Asp Asn Asn Gly Glu Met Pro Leu Phe Asp Ile Thr Gly Gln Asp Phe Glu Asn Lys Leu Arg Val Pro Leu Leu Glu Ile Leu Lys Tyr Pro Tyr Leu Leu Leu His Glu Arg Val Asn Glu Leu Cys Val Glu Ala Leu Cys Arg Met Glu Gln Ala Asn Cys Ser Phe Gln Val Phe Asp Lys His Pro Gly Ile Tyr Leu Phe Leu Val His Pro Asn Glu Met Val Arg Arg Trp Ala Ile Leu Thr Ala Arg Asn Leu Gly Lys Val Asp Arg Asp Asp Tyr Tyr Asp Leu Gln Glu Val Leu Leu Cys Leu Phe Lys Val Ile Glu Leu Gly Leu Leu Glu Ser Pro

Asp Ile Tyr Thr Ser Ser Val Leu Glu Lys Gly Lys Leu Ile Leu Leu

Pro	Ser	His	Met	Tyr	Asp	Thr	Thr	Asn	Tyr	Lys	Ser	Tyr	Trp	Leu	Gly
225					230					235					240
Ile	Cys	Met	Leu	Leu	Thr	Ile	Leu	Glu	Glu	Gln	Ala	Met	Asp	Ser	Leu
				245					250					255	
Leu	Leu	Gly	Ser	Asp	Lys	Gln	Asn	Asp	Phe	Met	Gln	Ser	Ile	Leu	His
			260					265					270		
Thr	Met	Glu	Arg	Glu	Ala	Asp	Asp	Asp	Ser	Val	Asp	Pro	Phe	Trp	Pro
		275					280					285			
Ala	Leu	His	Cys	Phe	Met	Val	Ile	Leu	Asp	Arg	Leu	Gly	Ser	Lys	Val
	290					295					300				
Trp	Gly	Gln	Leu	Met	Asp	Pro	Ile	Val	Ala	Phe	Gln	Thr	Ile	Ile	Asn
305					310					315					320
Asn	Ala	Ser	Tyr	Asn	Arg	Gly	Ile	Arg	His	Ile	Arg	Asn	Ser	Ser	Val
				325					330					335	
Arg	Thr	Lys	Leu	Glu	Pro	Glu	Ser	Tyr	Leu	Asp	Asp	Met	Val	Thr	Cys
			340					345					350		•
Ser	Gln	Ile	Val	Tyr	Asn	Tyr	Asn	Pro	Glu	Lys	Thr	Lys	Lys	Asp	Ser
		355					360					365			
Gly	Trp	Arg	Thr	Ala	Ile	Cys	Pro	Asp	Tyr	Cys	Pro	Asn	Met	Tyr	Glu
	370					375					380				
Glu	Met	Glu	Thr	Leu	Ala	Ser	Val	Leu	Gln	Ser	Asp	Ile	Gly	Gln	Asp
385					390					395					400
Met	Arg	Val	His	Asn	Ser	Thr	Phe	Leu	Arg	Phe	Ile	Pro	Phe	Val	Gln
				405					410					415	
Ser	Leu	Met	Asp	Leu	Lys	Asp	Leu	Gly	Val	Ala	Tyr	Ile	Ala	Gln	Val
			420		•			425					430		
Val	Asn	His	Leu	Tyr	Ser	Glu	Val	Lys	Glu	Val	Leu	Asn	Gln	Thr	Asp
		435					440					445			
Ala	Val	Cvs	Asp	Lvs	Val	Thr	Glu	Phe	Phe	Leu	Leu	Ile	Leu	Val	Ser

Val Ile Glu Leu His Arg Asn Lys Lys Cys Leu His Leu Leu Trp Val Ser Ser Gln Gln Trp Val Glu Ala Val Val Lys Cys Ala Lys Leu Pro Thr Thr Ala Phe Thr Arg Ser Ser Glu Lys Ser Ser Gly Asn Cys Ser Lys Gly Thr Ala Met Ile Ser Ser Leu Ser Leu His Ser Met Pro Ser Asn Ser Val Gln Leu Ala Tyr Val Gln Leu Ile Arg Ser Leu Leu Lys Glu Gly Tyr Gln Leu Gly Gln Gln Ser Leu Cys Lys Arg Phe Trp Asp Lys Leu Asn Leu Phe Leu Arg Gly Asn Leu Ser Leu Gly Trp Gln Leu Thr Ser Gln Glu Thr His Glu Leu Gln Ser Cys Leu Lys Gln Ile Ile Arg Asn Ile Lys Phe Lys Ala Pro Pro Cys Asn Thr Phe Val Asp Leu Thr Ser Ala Cys Lys Ile Ser Pro Ala Ser Tyr Asn Lys Glu Glu Ser Ser Leu Ser Ser Phe Asn Ile Ser Tyr Phe Lys

<210> 3314

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3314 Met Gln Gly Lys Cys Phe Ser Arg Thr Ser Leu Leu Ser Lys Gly Thr 10 5 15 1 Gln Gln Ser Gly Cys Thr Leu Cys Asp Leu Pro Ser Gln His Val Pro 20 25 30 Pro Leu Ser Pro Arg Arg Glu Arg Gln Glu Arg Val Phe Thr Val Ser 45 35 40 Val Ser Leu Ser His Gln Ala Gly Val Gln Trp Pro Asp Leu Gly Ser 50 55 60 Leu His Pro Leu Thr Pro Trp Phe Lys Gln Phe Ser Cys Leu Ser Leu 65 70 75 80 Pro Arg Ser Trp Asp Ser Arg His Ala Pro Pro Leu Pro Ala Asn Phe 85 90 95 Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser 100 105 110 Leu Ser

<210> 3315

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3315

Met Val Leu Asp Lys Arg Ala Gly Lys Lys Arg Ala Ala Arg Gly Gly

1 5 10 15

Phe Cys Pro Arg Arg Pro Gln Ala Gly Gly Pro His Gly Leu Cys Pro

Asp Val Leu Leu His Pro Ala Ala Pro Thr Thr Glu Thr Ala Pro Gly Glu Gly Thr Thr Leu Ser Thr Gly Gln Pro Val Ser Pro Gly Arg Leu Leu Ala His His Ser Trp Gly Pro Glu Glu Ala Pro Ala Gly Gly Gly Ser Gly Pro Gly Leu Ser Leu Ser Leu His Thr Asp Trp Ser Pro Ala Leu Ser Pro Thr Gly Thr Leu Arg Gly Asn Phe Ser Lys Val Leu Trp Gly Gln Arg Glu Val Val Glu Pro Ala Arg Leu Trp Glu Ala Pro Glu Lys Leu Pro Leu Pro Thr Ser Val Leu Ala Gly Phe Gly Pro Trp Ala Gly Pro Pro Gln Ala Pro Lys Gly Lys Val Val Gln Gly Lys Ala Leu Glu Ala Ala Gly Ile Arg Val Gly His Thr Glu Gly Tyr Gln Val Leu Trp Gly Pro Trp Gly Pro Ala Leu Glu Ala Asp Arg Ser Thr Gly Leu Arg Met Ser Cys Cys Pro Arg Thr Trp Trp Ser Gly Pro Gly Arg

Ala Ala Pro Pro Pro Ile Pro His Leu Val Ile Thr

<210> 3316

<211> 256

<212> PRT

<213> Homo sapiens

<400> 3316

Met Gly Cys Ala Arg Arg His Ala Gly Pro Arg Gly Ser Pro Val Lys

1 5 10 15

Gly Ser Gly Gly Leu Asp Ser Leu Trp Ala Trp Gly Gly Val Val Ser

20 25 30

Leu Cys Trp Leu Ser Tyr Arg Trp Trp Pro Val Ser Pro Gly Ser Gly

35 40 45

Cys Ser His Val Pro Ala Pro Thr Leu Pro Ala Arg Asp Arg Pro His

50 55 60

Gln Asp Pro Gly Ala Ala Pro Ala Ser Ala Arg Leu Ser Pro Arg Ser

65 70 75 80

Gln Val Arg Pro Gln Pro Leu Arg His Ala Ser Gly Ser Ser Cys Cys

85 90 95

Thr Cys Ser Ser Pro Cys Ala Ser Thr Leu Leu Ser Gly Phe Leu Pro

100 · 105

Leu Ala Thr Gly Arg Val Cys Val Lys Pro Gln Gly Leu Gln Lys Leu

115 120 125

Glu Val Pro Leu Ser Gly Arg Ile Met His Cys Thr Arg Gly Ile Lys

130 135 140

Gly Gly Asp Arg Lys Asn Tyr Gly Cys Cys Asp Thr Ser Pro Thr Ala

145 150 155 160

Pro Arg Leu Ala Ala Thr Ala Thr Arg Arg Asp Phe Ser Val Ala Ser

165 170 175

Arg Gly Val Gly Gln Arg Trp Ser Leu Val Thr Phe Ser Leu Gly Pro

180 185 190

Ala Pro Gly Leu Ser Ser Leu Gly Asn Ser Thr Ser Leu Ser Thr Pro

Leu Glu Gly Leu Thr Met Arg Gly Ala Gln Thr Gly Gly Ile Thr Thr
210 215 220

Trp Phe Gly Leu Tyr His Ser Pro Arg Asp Lys Ala Arg Gln Thr Pro 225 230 235 240

Leu His Ile Arg Ser Glu Phe Glu Leu Trp Leu His Asp Thr Asp Thr 245 250 255

<210> 3317

<211> 639

<212> PRT

<213> Homo sapiens

<400> 3317

Met Gly Pro Gln Gly Ala Arg Arg Gln Ala Phe Leu Ala Phe Gly Asp

1 5 10 15

Val Thr Val Asp Phe Thr Gln Lys Glu Trp Arg Leu Leu Ser Pro Ala
20 25 30

Gln Arg Ala Leu Tyr Arg Glu Val Thr Leu Glu Asn Tyr Ser His Leu
35 40 45

Val Ser Leu Gly Ile Leu His Ser Lys Pro Glu Leu Ile Arg Arg Leu 50 55 60

Glu Gln Gly Glu Val Pro Trp Gly Glu Glu Arg Arg Arg Pro Gly
65 70 75 80

Pro Cys Ala Gly Ile Tyr Ala Glu His Val Leu Arg Pro Lys Asn Leu 85 90 95

Gly Leu Ala His Gln Arg Gln Gln Gln Leu Gln Phe Ser Asp Gln Ser 100 105 110

Phe	Gln	Ser	Asp	Thr	Ala	Glu	Gly	Gln	Glu	Lys	Glu	Lys	Ser	Thr	Lys
		115					120					125			
Pro	Met	Ala	Phe	Ser	Ser	Pro	Pro	Leu	Arg	His	Ala	Val	Ser	Ser	Arg
	130					135					140				
Arg	Arg	Asn	Ser	Val	Val	Glu	Ile	Glu	Ser	Ser	Gln	Gly	Gln	Arg	Glu
145					150					155					160
Asn	Pro	Thr	Glu	Ile	Asp	Lys	Val	Leu	Lys	Gly	Ile	Glu	Asn	Ser	Arg
				165					170					175	
Trp	Gly	Ala	Phe	Lys	Cys	Ala	Glu	Arg	Gly	Gln	Asp	Phe	Ser	Arg	Lys
			180					185					190		
Met	Met	Val	Ile	Ile	His	Lys	Lys	Ala	His	Ser	Arg	Gln	Lys	Leu	Phe
		195					200					205			
Thr	Cys	Arg	Glu	Cys	His	Gln	Gly	Phe	Arg	Asp	Glu	Ser	Ala	Leu	Leu
	210					215					220				
Leu	His	Gln	Asn	Thr	His	Thr	Gly	Glu	Lys	Ser	Tyr	Val	Cys	Ser	Val
225					230					235					240
Cys	Gly	Arg	Gly	Phe	Ser	Leu	Lys	Ala	Asn	Leu	Leu	Arg	His	Gln	Arg
				245					250					255	
Thr	His	Ser	Gly	Glu	Lys	Pro	Phe	Leu	Cys	Lys	Val	Cys	Gly	Arg	Gly
			260					265					270		
Tyr	Thr	Ser	Lys	Ser	Tyr	Leu	Thr	Val	His	Glu	Arg	Thr	His	Thr	Gly
		275					280					285			
Glu	Lys	Pro	Tyr	Glu	Cys	Gln	Glu	Cys	Gly	Arg	Arg	Phe	Asn	Asp	Lys
	290					295					300				
Ser	Ser	Tyr	Asn	Lys	His	Leu	Lys	Ala	His	Ser	Gly	Glu	Lys	Pro	Phe
305					310					315					320
Val	Cys	Lys	Glu	Cys	Gly	Arg	Gly	Tyr	Thr	Asn	Lys	Ser	Tyr	Phe	Val
				325					330					335	
Val	Hie	Lve	Aro	Tle	Hie	Ser	Glv	Glu	Lve	Pro	Tur	Arg	Cve	Gln	Glu

			340					345					350		
Cys	Gly	Arg	Gly	Phe	Ser	Asn	Lys	Ser	His	Leu	Ile	Thr	His	Gln	Arg
		355					360			٠		365			
Thr	His	Ser	Gly	Glu	Lys	Pro	Phe	Ala	Cys	Arg	Gln	Cys	Lys	Gln	Ser
	370					375					380				
Phe	Ser	Val	Lys	Gly	Ser	Leu	Leu	Arg	His	Gln	Arg	Thr	His	Ser	Gly
385					390					395					400
Glu	Lys	Pro	Phe	Val	Cys	Lys	Asp	Cys	Glu	Arg	Ser	Phe	Ser	Gln	Lys
				405					410					415	
Ser	Thr	Leu	Val	Tyr	His	Gln	Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Phe
			420					425					430		
Val	Cys	Arg	Glu	Cys	Gly	Gln	Gly	Phe	Ile	Gln	Lys	Ser	Thr	Leu	Val
		435					440					445			
Lys	His	Gln	Ile	Thr	His	Ser	Glu	Glu	Lys	Pro	Phe	Val	Cys	Lys	Asp
	450					455					460				
Cys	Gly	Arg	Gly	Phe	Ile	Gln	Lys	Ser	Thr	Phe	Thr	Leu	His	Gln	Arg
465					470					475					480
Thr	His	Ser	Glu	Glu	Lys	Pro	Tyr	Gly	Cys	Arg	Glu	Cys	Gly	Arg	Arg
				485					490				•	495	
Phe	Arg	Asp	Lys	Ser	Ser	Tyr	Asn	Lys	His	Leu	Arg	Ala	His	Leu	Gly
			500					505					510		
Glu	Lys	Arg	Phe	Phe	Cys	Arg	Asp	Cys	Gly	Arg	Gly	Phe	Thr	Leu	Lys
		515					520					525			
Pro	Asn	Leu	Thr	Ile	His	Gln	Arg	Thr	His	Ser	Gly	Glu	Lys	Pro	Phe
	530					535					540				
Val	Cys	Asn	Val	Cys	Gly	Gln	Gly	Phe	Ser	Trp	Lys	Arg	Ser	Leu	Thr
545					550					555					560
Arg	His	His	Trp	Arg	Ile	His	Ser	Lys	Glu	Lys	Pro	Phe	Val	Cys	Gln
				565					570					575	

Glu Cys Lys Arg Gly Tyr Thr Ser Lys Ser Asp Leu Thr Val His Glu
580 585 590

Arg Ile His Thr Gly Glu Arg Pro Tyr Glu Cys Gln Glu Cys Gly Arg
595 600 605

Lys Phe Ser Asn Lys Ser Tyr Tyr Ser Lys His Leu Lys Arg His Leu
610 615 620

Arg Glu Lys Arg Phe Cys Thr Gly Ser Val Gly Glu Ala Ser Ser 625 630 635

<210> 3318

<211> 249

<212> PRT

<213> Homo sapiens

<400> 3318

Met Thr Ser Trp Ile Pro Leu Met Pro Gly Asp Ser Ala Asp Leu Phe

1 5 10 15

Gly Asp Gly Thr Thr Glu Asp Gly Ser Ala Ala Asn Gly Arg Leu Trp
20 25 30

Arg Thr Val Ile Ile Gly Glu Gln Glu His Arg Ile Asp Leu His Met
35 40 45

Ile Arg Pro Tyr Met Lys Val Val Thr His Gly Gly Tyr Tyr Gly Glu
50 55 60

Gly Leu Asn Ala Ile Ile Val Phe Ala Ala Cys Phe Leu Pro Asp Ser
65 70 75 80

Ser Leu Pro Asp Tyr His Tyr Ile Met Glu Asn Leu Phe Leu Tyr Val
85 90 95

Ile Ser Ser Leu Glu Leu Leu Val Ala Glu Asp Tyr Met Ile Val Tyr

Leu Asn Gly Ala Thr Pro Arg Arg Met Pro Gly Ile Gly Trp Leu Lys Lys Cys Tyr Gln Met Ile Gly Arg Arg Leu Arg Lys Asn Leu Lys Ser Leu Ile Ile Val His Pro Ser Trp Phe Ile Arg Thr Val Leu Ala Ile Ser Arg Pro Phe Ile Ser Val Lys Phe Ile Asn Lys Ile Gln Tyr Val His Ser Leu Glu Asp Leu Glu Gln Leu Ile Pro Met Glu His Val Gln Ile Pro Asp Cys Val Leu Gln Tyr Glu Glu Glu Arg Leu Lys Ala Arg Arg Glu Ser Ala Arg Pro Gln Pro Glu Phe Val Leu Pro Arg Ser Glu Glu Lys Pro Glu Val Ala Pro Val Glu Asn Arg Ser Ala Leu Val Ser Glu Asp Gln Glu Thr Ser Met Ser

<210> 3319

<211> 959

<212> PRT

<213> Homo sapiens

<400> 3319

Met Ala Pro Tyr Gln Gly Pro Ala Leu Tyr Val Tyr Asn Asn Ala Val

1 5 10 15

Phe	Thr	Pro	Glu	Asp	Trp	His	Gly	Ile	Gln	Glu	Ile	Ala	Arg	Ser	Arg
			20					25					30		
Lys	Lys	Asp	Asp	Pro	Leu	Lys	Val	Gly	Arg	Phe	Gly	Ile	Gly	Phe	Asn
		35					40					45			
Ser	Val	Tyr	His	Ile	Thr	Asp	Val	Pro	Cys	Ile	Phe	Ser	Gly	Asp	Gln
	50					55					60				
Ile	Gly	Met	Leu	Asp	Pro	His	Gln	Thr	Leu	Phe	Gly	Pro	His	Glu	Ser
65					70					75					80
Gly	Gln	Cys	Trp	Asn	Leu	Lys	Asp	Asp	Ser	Lys	Glu	Ile	Ser	Glu	Leu
				85					90					95	
Ser	Asp	Gln	Phe	Ala	Pro	Phe	Val	Gly	Ile	Phe	Gly	Ser	Thr	Lys	Glu
			100					105					110		
Thr	Phe	Ile	Asn	Gly	Asn	Phe	Pro	Gly	Thr	Phe	Phe	Arg	Phe	Pro	Leu
		115					120					125			
Arg	Leu	Gln	Pro	Ser	Gln	Leu	Ser	Ser	Asn	Leu	Tyr	Asn	Lys	Gln	Lys
	130					135					140				
Val	Leu	Glu	Leu	Phe	Glu	Ser	Phe	Arg	Ala	Asp	Ala	Asp	Thr	Val	Leu
145					150					155					160
Leu	Phe	Leu	Lys	Ser	Val	Gln	Asp	Val	Ser	Leu	Tyr	Val	Arg	Glu	Ala
				165					170					175	
Asp	Gly	Thr	Glu	Lys	Leu	Val	Phe	Arg	Val	Thr	Ser	Ser	Glu	Ser	Lys
			180			÷		185					190		
Ala	Leu	Lys	His	Glu	Arg	Pro	Asn	Ser	Ile	Lys	Ile	Leu	Gly	Thr	Ala
		195					200					205			
Ile	Ser	Asn	Tyr	Cys	Lys	Lys	Thr	Pro	Ser	Asn	Asn	Ile	Thr	Cys	Val
	210					215					220				
Thr	Tyr	His	Val	Asn	Ile	Val	Leu	Glu	Glu	Glu	Ser	Thr	Lys	Asp	Ala
225					230					235					240
Gln	Lys	Thr	Ser	Trp	Leu	Val	Cys	Asn	Ser	Val	Gly	Gly	Arg	Gly	Ιle

				245					250					255	
Ser	Ser	Lys	Leu	Asp	Ser	Leu	Ala	Asp	Glu	Leu	Lys	Phe	Val	Pro	Ile
			260					265					270		
Ile	Gly	Ile	Ala	Met	Pro	Leu	Ser	Ser	Arg	Asp	Asp	Glu	Ala	Lys	Gly
		275					280			•		285			
Ala	Thr	Ser	Asp	Phe	Ser	Gly	Lys	Ala	Phe	Cys	Phe	Leu	Pro	Leu	Pro
	290					295					300				
Pro	Gly	Glu	Glu	Ser	Ser	Thr	Gly	Leu	Pro	Val	His	Ile	Ser	Gly	Phe
305					310					315					320
Phe	Gly	Leu	Thr	Asp	Asn	Arg	Arg	Ser	Ile	Lys	Trp	Arg	Glu	Leu	Asp
				325					330					335	
Gln	Trp	Arg	Asp	Pro	Ala	Ala	Leu	Trp	Asn	Glu	Phe	Leu	Val	Met	Asn
			340					345					350		
Val	Val	Pro	Lys	Ala	Tyr	Ala	Thr	Leu	Ile	Leu	Asp	Ser	Ile	Lys	Arg
		355					360					365			
Leu	Glu	Met	Glu	Lys	Ser	Ser	Asp	Phe	Pro	Leu	Ser	Val	Asp	Val	Ile
	370					375					380				
Tyr	Lys	Leu	Trp	Pro	Glu	Ala	Ser	Lys	Val	Lys	Val	His	Trp	Gln	Pro
385					390					395					400
Val	Leu	Glu	Pro	Leu	Phe	Ser	Glu	Leu	Leu	Gln	Asn	Ala	Val	Ile	Tyr
				405					410					415	
Ser	Ile	Ser	Cys	Asp	Trp	Val	Arg	Leu	Glu	Gln	Val	Tyr	Phe	Ser	Glu
			420					425					430		
Leu	Asp	Glu	Asn	Leu	Glu	Tyr	Thr	Lys	Thr	Val	Leu	Asn _.	Tyr	Leu	Gln
		435					440					445			
Ser	Ser	Gly	Lys	Gln	Ile	Ala	Lys	Val	Pro	Gly	Asn	Val	Asp	Ala	Ala
	450					455					460			•	
Val	Gln	Leu	Thr	Ala	Ala	Ser	Gly	Thr	Thr	Pro	Val	Arg	Lys	Val	Thr
465					470					475					480

Pro	Ala	Trp	Val	Arg	Gln	Val	Leu	Arg	Lys	Cys	Ala	His	Leu	Gly	Cys
				485					490					495	
Ala	Glu	Glu	Lys	Leu	His	Leu	Leu	Glu	Phe	Val	Leu	Ser	Asp	Gln	Ala
			500					505					510		
Tyr	Ser	Glu	Leu	Leu	Gly	Leu	Glu	Leu	Leu	Pro	Leu	Gln	Asn	Gly	Asr
		515					520					525			
Phe	Val	Pro	Phe	Ser	Ser	Ser	Val	Ser	Asp	Gln	Asp	Val	Ile	Tyr	Ιlε
	530					535					540				
Thr	Ser	Ala	Glu	Tyr	Pro	Arg	Ser	Leu	Phe	Pro	Ser	Leu	Glu	Gly	Arg
545					550					555					560
Phe	Ile	Leu	Asp	Asn	Leu	Lys	Pro	His	Leu	Val	Ala	Ala	Leu	Lys	Glı
				565					570					575	
Ala	Ala	Gln	Thr	Arg	Gly	Arg	Pro	Cys	Thr	Gln	Leu	Gln	Leu	Leu	Asr
			580					585					590		
Pro	Glu	Arg	Phe	Ala	Arg	Leu	Ile	Lys	Glu	Val	Met	Asn	Thr	Phe	Tr
		595					600					605			
Pro	Gly	Arg	Glu	Leu	Ile	Val	Gln	Trp	Tyr	Pro	Phe	Asp	Glu	Asn	Arg
	610					615					620				
Asn	His	Pro	Ser	Val	Ser	Trp	Leu	Lys	Met	Val	Trp	Lys	Asn	Leu	Туі
625					630					635					640
Ile	His	Phe	Ser	Glu	Asp	Leu	Thr	Leu	Phe	Asp	Glu	Met	Pro	Leu	Ιlϵ
				645					650					655	
Pro	Arg	Thr	Ile	Leu	Glu	Glu	Gly	Gln	Thr	Cys	Val	Glu	Leu	Ile	Arg
			660					665					670		
Leu	Arg	Ile	Pro	Ser	Leu	Val	Ile	Leu	Asp	Asp	Glu	Ser	Glu	Ala	Glr
		675					680					685			
Leu	Pro	Glu	Phe	Leu	Ala	Asp	Ile	Val	Gln	Lys	Leu	Gly	Gly	Phe	Val
	690					695					700				
Lau	Lvc	Lvc	تام آ	Acr	۸ 1 م	Sor	TIA	Gla	Нic	Pro	Leu	Tla	Lve	Ive	Тът.

Ile His Ser Pro Leu Pro Ser Ala Val Leu Gln Ile Met Glu Lys Met Pro Leu Gln Lys Leu Cys Asn Gln Ile Thr Ser Leu Leu Pro Thr His Lys Asp Ala Leu Arg Lys Phe Leu Ala Ser Leu Thr Asp Ser Ser Glu Lys Glu Lys Arg Ile Ile Gln Glu Leu Ala Ile Phe Lys Arg Ile Asn His Ser Ser Asp Gln Gly Ile Ser Ser Tyr Thr Lys Leu Lys Gly Cys Lys Val Leu His His Thr Ala Lys Leu Pro Ala Asp Leu Arg Leu Ser Ile Ser Val Ile Asp Ser Ser Asp Glu Ala Thr Ile Arg Leu Ala Asn Met Leu Lys Ile Glu Gln Leu Lys Thr Thr Ser Cys Leu Lys Leu Val Leu Lys Asp Ile Glu Asn Ala Phe Tyr Ser His Glu Glu Val Thr Gln Leu Met Leu Trp Val Leu Glu Asn Leu Ser Ser Leu Lys Asn Glu Asn Pro Asn Val Leu Glu Trp Leu Thr Pro Leu Lys Phe Ile Gln Ile Ser Gln Glu Gln Met Val Ser Ala Gly Glu Leu Phe Asp Pro Asp Ile Glu Val Leu Lys Asp Leu Phe Cys Asn Glu Glu Gly Thr Tyr Phe Pro Pro Ser Val Phe Thr Ser Pro Asp Ile Leu His Ser Leu Arg Gln Ile Gly

Leu Lys Asn Glu Ala Ser Leu Lys Glu Lys Asp Val Val Gln Val 945 950 955

<210> 3320

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3320

Met Gly Ser Ala Leu Gly Thr Ala Gly Ser Trp Ala Gln Lys Gly Gly

1 5 10 15

Thr Lys Val Cys Val Gln His Gln Glu Gln Ala Ala Gly His Lys

20 25 30

Arg Glu Val Leu Gly Met Trp Val Gln His Gln Gly Gln Arg Ser Thr

35 40 45

Lys Gly Lys Arg Cys Gly Tyr Glu Phe Ser Thr Lys Asp Ser Gly Gln

50 55 60

Leu Ile Leu Ala Gly Val Leu Gly Met His Phe Arg His Glu Tyr Gln

65 70 75 80

Leu Pro Arg Pro Gly Thr Val Val His Ala Leu Ile Pro Ala Leu Trp

85 90 95

Glu Ala Lys Ala Asp Gly Ser Arg Gly Gln Gln Phe Glu Thr Ser Leu

100 105 110

Ala Asn Ile Val Lys Leu Cys Leu Tyr

115 120

<210> 3321

<211> 1268

<212> PRT

<213> Homo sapiens

<400> 3321

Met Arg Glu Leu Glu Met Ser Arg Thr Asn Thr Glu Asn Ile Glu Thr

1 5 10 15

Ser Thr Glu Thr Ala Glu Ser Ser Ser Glu Ser Leu Ser Ser Leu Glu 20 25 30

Gln Leu Asp Leu Leu Phe Glu Lys Glu Gln Gly Ala Val Arg Lys Ala 35 40 45

Gly Trp Leu Phe Phe Lys Pro Leu Val Thr Val Gln Lys Glu Arg Lys
50 55 60

Leu Glu Leu Val Ala Arg Arg Lys Trp Lys Gln Tyr Trp Val Thr Leu 65 70 75 80

Lys Gly Cys Thr Leu Leu Phe Tyr Glu Thr Tyr Gly Lys Asn Ser Met

85 90 95

Asp Gln Ser Ser Ala Pro Arg Cys Ala Leu Phe Ala Glu Asp Ser Ile 100 105 110

Val Gln Ser Val Pro Glu His Pro Lys Lys Glu Asn Val Phe Cys Leu 115 120 125

Ser Asn Ser Phe Gly Asp Val Tyr Leu Phe Gln Ala Thr Ser Gln Thr
130 135 140

Asp Leu Glu Asn Trp Val Thr Ala Val His Ser Ala Cys Ala Ser Leu 145 150 155 160

Phe Ala Lys Lys His Gly Lys Glu Asp Thr Leu Arg Leu Leu Lys Asn 165 170 175

Gln Thr Lys Asn Leu Leu Gln Lys Ile Asp Met Asp Ser Lys Met Lys 180 185 190

Lys	Met	Ala	Glu	Leu	Gln	Leu	Ser	Val	Val	Ser	Asp	Pro	Lys	Asn	Arg
		195					200					205			
Lys	Ala	Ile	Glu	Asn	Gln	Ile	Gln	Gln	Trp	Glu	Gln	Asn	Leu	Glu	Lys
	210					215					220				
Phe	His	Met	Asp	Leu	Phe	Arg	Met	Arg	Cys	Tyr	Leu	Ala	Ser	Leu	Gln
225					230					235					240
Gly	Gly	Glu	Leu	Pro	Asn	Pro	Lys	Ser	Leu	Leu	Ala	Ala	Ala	Ser	Arg
				245					250					255	
Pro	Ser	Lys	Leu	Ala	Leu	Gly	Arg	Leu	Gly	Ile	Leu	Ser	Val	Ser	Ser
			260					265					270		
Phe	His	Ala	Leu	Val	Cys	Ser	Arg	Asp	Asp	Ser	Ala	Leu	Arg	Lys	Arg
		275					280					285			
Thr	Leu	Ser	Leu	Thr	Gln	Arg	Gly	Arg	Asn	Lys	Lys	Gly	Ile	Phe	Ser
	290					295					300				
Ser	Leu	Lys	Gly	Leu	Asp	Thr	Leu	Ala	Arg	Lys	Gly	Lys	Glu	Lys	Arg
305					310					315					320
Pro	Ser	Ile	Thr	Gln	Val	Asp	Glu	Leu	Leu	His	Ile	Tyr	Gly	Ser	Thr
				325					330					335	
Val	Asp	Gly	Val	Pro	Arg	Asp	Asn	Ala	Trp	Glu	Ile	Gln	Thr	Tyr	Val
			340					345					350		
His	Phe	Gln	Asp	Asn	His	Gly	Val	Thr	Val	Gly	Ile	Lys	Pro	Glu	His
		355					360					365			
Arg	Val	Glu	Asp	Ile	Leu	Thr	Leu	Ala	Cys	Lys	Met	Arg	Gln	Leu	Glu
	370					375					380				
Pro	Ser	His	Tyr	Gly	Leu	Gln	Leu	Arg	Lys	Leu	Val	Asp	Asp	Asn	Val
385					390					395				•	400
Glu	Tyr	Cys	Ile	Pro	Ala	Pro	Tyr	Glu	Tyr	Met	Gln	Gln	Gln	Val	Tyr
				405					410					415	
Asp	Glu	Ile	Glu	Val	Phe	Pro	Leu	Asn	Val	Tvr	Asp	Val	Gln	Leu	Thr

			420					425					430		
Lys	Thr	Gly	Ser	Val	Cys	Asp	Phe	Gly	Phe	Ala	Val	Thr	Ala	Gln	Val
		435					440					445			
Asp	Glu	Arg	Gln	His	Leu	Ser	Arg	Ile	Phe	Ile	Ser	Asp	Val	Leu	Pro
	450					455					460				
Asp	Gly	Leu	Ala	Tyr	Gly	Glu	Gly	Leu	Arg	Lys	Gly	Asn	Glu	Ile	Met
465					470					475					480
Thr	Leu	Asn	Gly	Glu	Ala	Val	Ser	Asp	Leu	Asp	Leu	Lys	Gln	Met	Glu
				485					490					495	
Ala	Leu	Phe	Ser	Glu	Lys	Ser	Val	Gly	Leu	Thr	Leu	Ile	Ala	Arg	Pro
			500					505					510		
Pro	Asp	Thr	Lys	Ala	Thr	Leu	Cys	Thr	Ser	Trp	Ser	Asp	Ser	Asp	Leu
		515		٠			520					525			
Phe	Ser	Arg	Asp	Gln	Lys	Ser	Leu	Leu	Pro	Pro	Pro	Asn	Gln	Ser	Gln
	530					535					540				
Leu	Leu	Glu	Glu	Phe	Leu	Asp	Asn	Phe	Lys	Lys	Asn	Thr	Ala	Asn	Asp
545					550					555					560
Phe	Ser	Asn	Val	Pro	Asp	Ile	Thr	Thr	Gly	Leu	Lys	Arg	Ser	Gln	Thr
				565					570					575	
Asp	Gly	Thr	Leu	Asp	Gln	Val	Ser	His	Arg	Glu	Lys	Met	Glu	Gln	Thr
			580					585					590		
Phe	Arg	Ser	Ala	Glu	Gln	Ile	Thr	Ala	Leu	Cys	Lys	Ser	Phe	Asn	Asp
		595					600					605			
Ser	Gln	Ala	Asn	Gly	Met	Glu	Gly	Pro	Arg	Glu	Asn	Gln	Asp	Pro	Pro
	610					615					620				
Pro	Arg	Pro	Leu	Ala	Arg	His	Leu	Ser	Asp	Ala	Asp	Arg	Leu	Arg	Lys
625					630					635					640
Val	Ile	Gln	Glu	Leu	Val	Asp	Thr	Glu	Lys	Ser	Tyr	Val	Lys	Asp	Leu
				645					650					655	

Ser	Cys	Leu	Phe	Glu	Leu	Tyr	Leu	Glu	Pro	Leu	Gln	Asn	Glu	Thr	Phe	
			660					665					670			
Leu	Thr	Gln	Asp	Glu	Met	Glu	Ser	Leu	Phe	Gly	Ser	Leu	Pro	Glu	Met	
		675					680					685				
Leu	Glu	Phe	Gln	Lys	Val	Phe	Leu	Glu	Thr	Leu	Glu	Asp	Gly	Ile	Ser	
	690					695					700					
Ala	Ser	Ser	Asp	Phe	Asn	Thr	Leu	Glu	Thr	Pro	Ser	Gln	Phe	Arg	Lys	
705					710					715					720	
Leu	Leu	Phe	Pro	Leu	Gly	Gly	Ser	Phe	Leu	Tyr	Tyr	Ala	Asp	His	Phe	
				725					730					735		
Lys	Leu	Tyr	Ser	Gly	Phe	Cys	Ala	Asn	His	Ile	Lys	Val	Gln	Lys	Val	
			740					745					750			
Leu	Glu	Arg	Ala	Lys	Thr	Asp	Lys	Ala	Phe	Lys	Ala	Phe	Leu	Asp	Ala	
		755					760					765				
Arg	Asn	Pro	Thr	Lys	Gln	His	Ser	Ser	Thr	Leu	Glu	Ser	Tyr	Leu	Ile	
	770					775					780					
Lys	Pro	Val	Gln	Arg	Val	Leu	Lys	Tyr	Pro	Leu	Leu	Leu	Lys	Glu	Leu	
785					790					795					800	
Val	Ser	Leu	Thr	Asp	Gln	Glu	Ser	Glu	Glu	His	Tyr	His	Leu	Thr	Glu	
				805					810					815		
Ala	Leu	Lys	Ala	Met	Glu	Lys	Val	Ala	Ser	His	Ile	Asn	Glu	Met	Gln	
			820					825					830			
Lys	Ile	Tyr	Glu	Asp	Tyr	Gly	Thr	Val	Phe	Asp	Arg	Leu	Val	Ala	Glu	
		835					840					845				
Gln	Ser	Gly	Thr	Glu	Lys	Glu	Gln	Pro	Glu	Trp	Ser	Ser	Glu	Val	Met	
	850					855					860					
Asp	Val	Leu	Asp	Pro	Arg	Gly	Lys	Leu	Thr	Lys	Gly	Thr	Leu	Glu	Glu	
865					870					875					880	
Pro	Arg	Thr	Leu	Val	Thr	Glu	Leu	Ser	Met	Gly	Glu	Leu	Leu	Met	His	

	885			890		895
Ser Thr Val	Ser Trp	Leu Asn	Pro Phe	Leu Ser	Leu Gly	Lys Ala Arg
	900		905			910
Lys Asp Leu	Glu Leu	Thr Val	Phe Val	Phe Lys	Arg Ala	Val Ile Leu
915			920		925	
Val Tyr Lys	Lys Asn	Cys Lys	Leu Lys	Lys Lys	Leu Pro	Ser Asn Ser
930		935			940	
Arg Pro Ala	His Asn	Ser Thr	Asp Leu	Asp Pro	Phe Lys	Phe Arg Trp
945		950		955		960
Leu Ile Pro	Ile Ser	Ala Leu	Gln Val	Arg Leu	Gly Asn	Pro Ala Gly
	965			970		975
Thr Glu Asn	Asn Ser	Ile Trp	Glu Leu	Ile His	Thr Lys	Ser Glu Ile
	980		985			990
Glu Gly Arg	Pro Glu	Thr Ile	Phe Gln	Leu Cys	Cys Ser	Asp Ser Glu
995			1000		1005	
Ser Lys Thr	Asn Ile	Val Lys	Val Ile	Arg Ser	Ile Leu	Arg Glu Asn
1010		1015			1020	
Phe Arg Arg	His Ile	Lys Cys	Glu Leu	Pro Leu	Glu Lys	Thr Cys Lys
1025]	1030		1035		1040
Asp Arg Leu	Val Pro	Leu Lys	Asn Arg	Val Pro	Val Ser	Ala Lys Leu
	1045			1050		1055
Ala Ser Ser	Arg Ser	Leu Lys	Val Leu	Lys Asn	Ser Ser	Ser Asn Glu
	1060		1065			1070
Trp Thr Gly	Glu Thr	Gly Lys	Gly Thr	Leu Leu	Asp Ser	Tyr Glu Gly
1075			1080		1085	
Ser Leu Ser	Ser Gly	Thr Gln	Ser Ser	Gly Cys	Pro Thr	Ala Glu Gly
1090		1095			1100	
Arg Gln Asp	Ser Lys	Ser Thr	Ser Pro	Gly Lys	Tyr Pro	His Pro Gly
1105]	1110		1115		1120

Leu Ala Asp Phe Ala Asp Asn Leu Ile Lys Glu Ser Asp Ile Leu Ser 1125 1130 1135

Asp Glu Asp Asp His Arg Gln Thr Val Lys Gln Gly Ser Pro Thr

1140 1145 1150

Lys Asp Ile Glu Ile Gln Phe Gln Arg Leu Arg Ile Ser Glu Asp Pro 1155 1160 1165

Asp Val His Pro Glu Ala Glu Gln Gln Pro Gly Pro Glu Ser Gly Glu 1170 1175 1180

Gly Gln Lys Gly Glu Gln Pro Lys Leu Val Arg Gly His Phe Cys 1185 1190 1195 1200

Pro Ile Lys Arg Lys Thr Asn Ser Thr Lys Arg Asp Arg Gly Thr Leu 1205 1210 1215

Leu Lys Ala Gln Ile Arg His Gln Ser Leu Asp Ser Gln Ser Glu Asn 1220 1225 1230

Ala Thr Ile Asp Leu Asn Ser Val Leu Glu Arg Glu Phe Ser Val Gln 1235 1240 1245

Ser Leu Thr Ser Val Val Ser Glu Glu Cys Phe Tyr Glu Thr Glu Ser 1250 1255 1260

His Gly Lys Ser

1265

<210> 3322

<211> 514

<212> PRT

<213> Homo sapiens

<400> 3322

Met Glu Glu Asn Val Phe Trp Glu Cys Lys Ala Asn Gly Arg Pro Lys

1				5					10					15	
Pro	Thr	Tyr	Lys	Trp	Leu	Lys	Asn	Gly	Glu	Pro	Leu	Leu	Thr	Arg	Asp
			20					25					30		
Arg	Ile	Gln	Ile	Glu	Gln	Gly	Thr	Leu	Asn	Ile	Thr	Ile	Val	Asn	Leu
		35					40					45			
Ser	Asp	Ala	Gly	Met	Tyr	Gln	Cys	Leu	Ala	Glu	Asn	Lys	His	Gly	Val
	50					55					60				
Ile	Phe	Ser	Asn	Ala	Glu	Leu	Ser	Val	Ile	Ala	Val	Gly	Pro	Asp	Phe
65					70					75					80
Ser	Arg	Thr	Leu	Leu	Lys	Arg	Val	Thr	Leu	Val	Lys	Val	Gly	Gly	Glu
				85					90					95	
Val	Val	Ile	Glu	Cys	Lys	Pro	Lys	Ala	Ser	Pro	Lys	Pro	Val	Tyr	Thr
			100					105					110		
Trp	Lys	Lys	Gly	Arg	Asp	Ile	Leu	Lys	Glu	Asn	Glu	Arg	Ile	Thr	Ile
		115					120					125			
Ser	Glu	Asp	Gly	Asn	Leu	Arg	Ile	Ile	Asn	Val	Thr	Lys	Ser	Asp	Ala
	130					135					140				
Gly	Ser	Tyr	Thr	Cys	Ile	Ala	Thr	Asn	His	Phe	Gly	Thr	Ala	Ser	Ser
145					150					155					160
Thr	Gly	Asn	Leu	Val	Val	Lys	Asp	Pro	Thr	Arg	Val	Met	Val	Pro	Pro
				165					170					175	
Ser	Ser	Met	Asp	Val	Thr	Val	Gly	Glu	Ser	Ile	Val	Leu	Pro	Cys	Gln
			180					185					190		
Val	Thr	His	Asp	His	Ser	Leu	Asp	Ile	Val	Phe	Thr	Trp	Ser	Phe	Asn
		195					200			•		205			
Gly	His	Leu	Ile	Asp	Phe	Asp	Arg	Asp	Gly	Asp	His	Phe	Glu	Arg	Val
	210					215					220				
Gly	Gly	Asp	Ser	Ala	Gly	Asp	Leu	Met	Ile	Arg	Asn	Ile	Gln	Leu	Lys
225					230					235					240

His	Ala	Gly	Lys	Tyr	Val	Cys	Met	Val	Gln	Thr	Ser	Val	Asp	Arg	Leu
				245					250					255	
Ser	Ala	Ala	Ala	Asp	Leu	Ile	Val	Arg	Gly	Pro	Pro	Gly	Pro	Pro	Glu
			260					265					270		
Ala	Val	Thr	Ile	Asp	Glu	Ile	Thr	Asp	Thr	Thr	Ala	Gln	Leu	Ser	Trp
		275					280					285			
Arg	Pro	Gly	Pro	Asp	Asn	His	Ser	Pro	Ile	Thr	Met	Tyr	Val	Ile	Gln
	290					295					300				
Ala	Arg	Thr	Pro	Phe	Ser	Val	Gly	Trp	Gln	Ala	Val	Ser	Thr	Val	Pro
305					310					315					320
Glu	Leu	Ile	Asp	Gly	Lys	Thr	Phe	Thr	Ala	Thr	Val	Val	Gly	Leu	Asn
				325					330					335	
Pro	Trp	Val	Glu	Tyr	Glu	Phe	Arg	Thr	Val	Ala	Ala	Asn	Val	Ile	Gly
			340					345					350		
Ile	Gly	Glu	Pro	Ser	Arg	Pro	Ser	Glu	Lys	Arg	Arg	Thr	Glu	Glu	Ala
		355					360					365			
Leu	Pro	Glu	Val	Thr	Pro	Ala	Asn	Val	Ser	Gly	Gly	Gly	Gly	Ser	Lys
	370					375					380				
Ser	Glu	Leu	Val	Ile	Thr	Trp	Glu	Thr	Val	Pro	Glu	Glu	Leu	Gln	Asr
385					390					395					400
Gly	Arg	Gly	Phe	Gly	Tyr	Val	Val	Ala	Phe	Arg	Pro	Tyr	Gly	Lys	Met
	,			405					410					415	
Ile	Trp	Met	Leu	Thr	Val	Leu	Ala	Ser	Ala	Asp	Ala	Ser	Arg	Tyr	Val
			420					425					430		
Phe	Arg	Asn	Glu	Ser	Val	His	Pro	Phe	Ser	Pro	Phe	Glu	Val	Lys	Val
		435					440					445	•		
Gly	Val	Phe	Asn	Asn	Lys	Gly	Glu	Gly	Pro	Phe	Ser	Pro	Thr	Thr	Val
	450					455					460				
Val	Tvr	Ser	Ala	Glu	Glu	Glii	Pro	Thr	Lvs	Pro	Pro	Ala	Ser	He	Phe

470 475 480 465 Ala Arg Ser Leu Ser Ala Thr Asp Ile Glu Val Phe Trp Ala Ser Pro 490 495 485 Leu Glu Lys Asn Arg Gly Arg Ile Gln Gly Tyr Glu Val Lys Tyr Trp 500 505 510 Arg His <210> 3323 <211> 429 <212> PRT <213> Homo sapiens

GIn His Val Tyr Lys Lys Leu Cys Leu Cys Ala Gly Ala Lys Pro Lys

35 40 45

Leu Ile Cys Glu Gly Asn Pro Tyr Val Leu Gly Ile Arg Asp Thr Asp
50 55 60

Ser Ala Gln Glu Phe Gln Lys Gln Leu Thr Lys Ala Lys Arg Ile Met

65 70 75 80

Ile Ile Gly Asn Gly Gly Ile Ala Leu Glu Leu Val Tyr Glu Ile Glu
85 90 95

Gly Cys Glu Val Ile Trp Ala Ile Lys Asp Lys Ala Ile Gly Asn Thr
100 105 110

Phe	Phe	Asp	Ala	Gly	Ala	Ala	Glu	Phe	Leu	Thr	Ser	Lys	Leu	Ile	Ala
		115					120					125			
Glu	Lys	Ser	Glu	Ala	Lys	Ile	Ala	His	Lys	Arg	Thr	Arg	Tyr	Thr	Thr
	130					135					140				
Glu	Gly	Arg	Lys	Lys	Glu	Ala	Arg	Ser	Lys	Ser	Lys	Ala	Asp	Asn	Val
145					150					155					160
Gly	Ser	Ala	Leu	Gly	Pro	Asp	Trp	His	Glu	Gly	Leu	Asn	Leu	Lys	Gly
				165					170					175	
Thr	Lys	Glu	Phe	Ser	His	Lys	Ile	His	Leu	Glu	Thr	Met	Cys	Glu	Val
			180					185					190		
Lys	Lys	Ile	Tyr	Leu	Gln	Asp	Glu	Phe	Arg	Ile	Leu	Lys	Lys	Lys	Ser
		195					200					205			
Phe	Thr	Phe	Pro	Arg	Asp	His	Lys	Ser	Val	Thr	Ala	Asp	Thr	Glu	Met
	210					215					220				
Trp	Pro	Val	Tyr	Val	Glu	Leu	Thr	Asn	Glu	Lys	Ile	Tyr	Gly	Cys	Asp
225					230					235					240
Phe	Ile	Val	Ser	Ala	Thr	Gly	Val	Thr	Pro	Asn	Val	Glu	Pro	Phe	Leu
				245					250					255	
His	Gly	Asn	Ser	Phe	Asp	Leu	Gly	Glu	Asp	Gly	Gly	Leu	Lys	Val	Asp
			260					265					270		
Asp	His	Met	His	Thr	Ser	Leu	Pro	Asp	Ile	Tyr	Ala	Ala	Gly	Asp	Ile
		275					280					285			
Cys	Thr	Thr	Ser	Trp	Gln	Leu	Ser	Pro	Val	Trp	Gln	Gln	Met	Arg	Leu
	290					295					300				
Trp	Thr	Gln	Ala	Arg	Gln	Met	Gly	Trp	Tyr	Ala	Ala	Lys	Cys	Met	Ala
305					310					315					320
Ala	Ala	Ser	Ser	Gly	Asp	Ser	Ile	Asp	Met	Asp	Phe	Ser	Phe	Glu	Leu
				325					330					335	
Phe	Ala	His	Val	Thr	Lvs	Phe	Phe	Asn	Tvr	Lys	Val	Val	Leu	Leu	Gly

Lys Tyr Asn Ala Gln Gly Leu Gly Ser Asp His Glu Leu Met Leu Arg Cys Thr Lys Gly Arg Glu Tyr Ile Lys Val Val Met Gln Asn Gly Arg Met Met Gly Ala Val Leu Ile Gly Glu Thr Asp Leu Glu Glu Thr Phe Glu Asn Leu Ile Leu Asn Gln Met Asn Leu Ser Ser Tyr Gly Glu Asp Leu Leu Asp Pro Asn Ile Asp Ile Glu Asp Tyr Phe Asp

420 425

<210> 3324

<211> 1130

<212> PRT

<213> Homo sapiens

<400> 3324

Met Gly Lys Val Gly Ala Gly Gly Gly Ser Gln Ala Arg Leu Ser Ala Leu Leu Ala Gly Ala Gly Leu Leu Ile Leu Cys Ala Pro Gly Val Cys Gly Gly Gly Ser Cys Cys Pro Ser Pro His Pro Ser Ser Ala Pro Arg Ser Ala Ser Thr Pro Arg Gly Phe Ser His Gln Gly Arg Pro Gly Arg Ala Pro Ala Thr Pro Leu Pro Leu Val Val Arg Pro Leu Phe Ser Val

Ala	Pro	Gly	Asp	Arg	Ala	Leu	Ser	Leu	Glu	Arg	Ala	Arg	Gly	Thr	Gly
				85					90					95	
Ala	Ser	Met	Ala	Val	Ala	Ala	Arg	Ser	Gly	Arg	Arg	Arg	Arg	Ser	Gly
			100					105					110		
Ala	Asp	Gln	Glu	Lys	Ala	Glu	Arg	Gly	Glu	Gly	Ala	Ser	Arg	Ser	Pro
		115					120					125			
Arg	Gly	Val	Leu	Arg	Asp	Gly	Gly	Gln	Gln	Glu	Pro	Gly	Thr	Arg	Glu
	130					135					140				
Arg	Asp	Pro	Asp	Lys	Ala	Thr	Arg	Phe	Arg	Met	Glu	Glu	Leu	Arg	Leu
145					150					155					160
Thr	Ser	Thr	Thr	Phe	Ala	Leu	Thr	Gly	Asp	Ser	Ala	His	Asn	Gln	Ala
				165					170					175	
Met	Val	His	Trp	Ser	Gly	His	Asn	Ser	Ser	Val	Ile	Leu	Ile	Leu	Thr
			180					185					190		
Lys	Leu	Tyr	Asp	Tyr	Asn	Leu	Gly	Ser	Ile	Thr	Glu	Ser	Ser	Leu	Trp
		195					200					205			
Arg	Ser	Thr	Asp	Tyr	Gly	Thr	Thr	Tyr	Glu	Lys	Leu	Asn	Asp	Lys	Val
	210					215					220				
Gly	Leu	Lys	Thr	Ile	Leu	Ser	Tyr	Leu	Tyr	Val	Cys	Pro	Thr	Asn	Lys
225					230					235					240
Arg	Lys	Ile	Met	Leu	Leu	Thr	Asp	Pro	Glu	Ile	Glu	Ser	Ser	Leu	Leu
				245					250					255	
Ile	Ser	Ser	Asp	Glu	Gly	Ala	Thr	Tyr	Gln	Lys	Tyr	Arg	Leu	Asn	Phe
			260					265					270		
Tyr	Ile	Gln	Ser	Leu	Leu	Phe	His	Pro	Lys	Gln	Glu	Asp	Trp	Ile	Leu
		275					280					285			
Ala	Tyr	Ser	Gln	Asp	Gln	Lys	Leu	Tyr	Ser	Ser	Ala	Glu	Phe	Gly	Arg
	290					295					300				
Arg		Gln	Leu	Ile	Gln		Glv	Val	Val	Pro		Arg	Phe	Tvr	Trn

Ser Val Met Gly Ser Asn Lys Glu Pro Asp Leu Val His Leu Glu Ala Arg Thr Val Asp Gly His Ser His Tyr Leu Thr Cys Arg Met Gln Asn Cys Thr Glu Ala Asn Arg Asn Gln Pro Phe Pro Gly Tyr Ile Asp Pro Asp Ser Leu Ile Val Gln Asp His Tyr Val Phe Val Gln Leu Thr Ser Gly Gly Arg Pro His Tyr Tyr Val Ser Tyr Arg Arg Asn Ala Phe Ala Gln Met Lys Leu Pro Lys Tyr Ala Leu Pro Lys Asp Met His Val Ile Ser Thr Asp Glu Asn Gln Val Phe Ala Ala Val Gln Glu Trp Asn Gln Asn Asp Thr Tyr Asn Leu Tyr Ile Ser Asp Thr Arg Gly Val Tyr Phe Thr Leu Ala Leu Glu Asn Val Gln Ser Ser Arg Gly Pro Glu Gly Asn Ile Met Ile Asp Leu Tyr Glu Val Ala Gly Ile Lys Gly Met Phe Leu Ala Asn Lys Lys Ile Asp Asn Gln Val Lys Thr Phe Ile Thr Tyr Asn Lys Gly Arg Asp Trp Arg Leu Leu Gln Ala Pro Asp Thr Asp Leu Arg Gly Asp Pro Val His Cys Leu Leu Pro Tyr Cys Ser Leu His Leu His Leu Lys Val Ser Glu Asn Pro Tyr Thr Ser Gly Ile Ile Ala Ser Lys

Asp	Thr	Ala	Pro	Ser	Ile	Ile	Val	Ala	Ser	Gly	Asn	Ile	Gly	Ser	Glu
545					550					555					560
Leu	Ser	Asp	Thr	Asp	Ile	Ser	Met	Phe	Val	Ser	Ser	Asp	Ala	Gly	Asn
				565					570					575	
Thr	Trp	Arg	Gln	Ile	Phe	Glu	Glu	Glu	His	Ser	Val	Leu	Tyr	Leu	Asp
			580					585					590		
Gln	Gly	Gly	Val	Leu	Val	Ala	Met	Lys	His	Thr	Ser	Leu	Pro	Ile	Arg
		595					600					605			
His	Leu	Trp	Leu	Ser	Phe	Asp	Glu	Gly	Arg	Ser	Trp	Ser	Lys	Tyr	Ser
	610					615					620				
Phe	Thr	Ser	Ile	Pro	Leu	Phe	Val	Asp	Gly	Val	Leu	Gly	Glu	Pro	Gly
625					630					635					640
Glu	Glu	Thr	Leu	Ile	Met	Thr	Val	Phe	Gly	His	Phe	Ser	His	Arg	Ser
				645					650					655	
Glu	Trp	Gln	Leu	Val	Lys	Val	Asp	Tyr	Lys	Ser	Ile	Phe	Asp	Arg	Arg
			660					665					670		
Cys	Ala	Glu	Glu	Asp	Tyr	Arg	Pro	Trp	Gln	Leu	His	Ser	Gln	Gly	Glu
		675					680					685			
Ala	Cys	Ile	Met	Gly	Ala	Lys	Arg	Ile	Tyr	Lys	Lys	Arg	Lys	Ser	Glu
	690					695					700				
Arg	Lys	Cys	Met	Gln		Lys	Tyr	Ala	Gly		Met	Glu	Ser	Glu	
705					710					715					720
Cys	Val	Cys	Thr		Ala	Asp	Phe	Asp		Asp	Tyr	Gly	Tyr		Arg
				725					730					735	_
His	Ser	Asn		Gln	Cys	Leu	Pro		Phe	Trp	Phe	Asn	Pro	Ser	Ser
_	_	_	740	_	~	_	~ -	745		_	_		750		
Leu	Ser		Asp	Cys	Ser	Leu		Gln	Ser	Tyr	Leu		Ser	Thr	Gly
_		755 -			~		760	_			~ -	765			
Tyr	Arg	Lys	Val	Val	Ser	Asn	Asn	Cys	Thr	Asp	Gly	Val	Arg	Glu	Gln

Tyr Thr Ala Lys Pro Gln Lys Cys Pro Gly Lys Ala Pro Arg Gly Leu Arg Ile Val Thr Ala Asp Gly Lys Leu Thr Ala Glu Gln Gly His Asn Val Thr Leu Met Val Gln Leu Glu Glu Gly Asp Val Gln Arg Thr Leu Ile Gln Val Asp Phe Gly Asp Gly Ile Ala Val Ser Tyr Val Asn Leu Ser Ser Met Glu Asp Gly Ile Lys His Val Tyr Gln Asn Val Gly Ile Phe Arg Val Thr Val Gln Val Asp Asn Ser Leu Gly Ser Asp Ser Ala Val Leu Tyr Leu His Val Thr Cys Pro Leu Glu His Val His Leu Ser Leu Pro Phe Val Thr Thr Lys Asn Lys Glu Val Asn Ala Thr Ala Val Leu Trp Pro Ser Gln Val Gly Thr Leu Thr Tyr Val Trp Trp Tyr Gly Asn Asn Thr Glu Pro Leu Ile Thr Leu Glu Gly Ser Ile Ser Phe Arg Phe Thr Ser Glu Gly Met Asn Thr Ile Thr Val Gln Val Ser Ala Gly Asn Ala Ile Leu Gln Asp Thr Lys Thr Ile Ala Val Tyr Glu Glu Phe Arg Ser Leu Arg Leu Ser Phe Ser Pro Asn Leu Asp Asp Tyr Asn Pro Asp Ile Pro Glu Trp Arg Arg Asp Ile Gly Arg Val Ile Lys Lys Ser

Leu Val Glu Ala Thr Gly Val Pro Gly Gln His Ile Leu Val Ala Val 1010 1015 1020 Leu Pro Gly Leu Pro Thr Thr Ala Glu Leu Phe Val Leu Pro Tyr Gln 1030 1035 1025 1040 Asp Pro Ala Gly Glu Asn Lys Arg Ser Thr Asp Asp Leu Glu Gln Ile 1050 1045 1055 Ser Glu Leu Leu Ile His Thr Leu Asn Gln Asn Ser Val His Phe Glu 1060 1065 1070 Leu Lys Pro Gly Val Arg Val Leu Val His Ala Ala His Leu Thr Ala 1075 1080 1085 Ala Pro Leu Val Asp Leu Thr Pro Thr His Ser Gly Ser Ala Met Leu 1090 1095 1100 Val Leu Leu Ser Val Val Phe Val Gly Leu Ala Val Phe Val Ile Tyr 1105 1110 1115 1120 Lys Phe Lys Arg Lys Tyr Phe His Ser Cys 1125 1130

<210> 3325

<211> 196

<212> PRT

<213> Homo sapiens

<400> 3325

Met Met Ser Asp Gly Lys Leu Gly Arg Gln Ser Val Asp Ser Pro Cys

1 5 10 15

Ser Gly Thr Thr Cys Ser Leu Thr Ala Ala Gly Gly His Thr Thr Arg
20 25 30

Ile Ala Leu Leu Cys His Leu Val Ile Val Phe Phe Ala Leu Thr Glu

Asp Arg Lys Gly Gly Lys Ile Ser Phe Cys Ala His Thr Pro Leu Asn Cys Met Phe Gly Phe Phe Cys Phe Val Lys Gly Cys Lys Thr Ser Ser Ser Cys Ser Thr Ala Asn Thr Arg Gly Gln His Pro Ala Ser Cys Leu Cys Phe Pro Ala Gly Arg Thr His Arg Gln Ser Gly Asn Leu Thr Phe Pro Arg Ser Glu Asn Gly Leu Phe Ser Ser Glu Val Met Ile Arg Glu Ser Leu Leu Ile Phe Val Ile His Thr Lys Thr Leu Thr Ser Gly Glu Lys Leu Asp Thr Leu Asn Asn Glu Lys Ser Glu Gln Ala Phe Arg Gly 160 -Cys Val Ser His Thr Glu Gly Ala Ser Pro Trp Ala His Ser Gln Asp Pro Ser Phe Thr Asp His Arg Gly Cys Val Leu Gln Val Ala Asp Thr Ala Leu Trp Phe

<210> 3326

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3326

Met Leu Ser Leu Glu Cys Thr Gln Leu Pro His His Ala Ser Cys Thr Cys Cys Ser Thr Ala Pro Pro Ser Val Ser Ala Ala Arg Pro Ser Pro Cys Ser Ile Val Val Ser Phe Asp Cys Ala Gly Trp Arg Val Pro Cys Pro Pro Ser Leu Val Phe Gln Asn Ser Phe Gly Trp Phe Cys Thr Cys Val Phe His Met Val Phe Thr Ser Ile Val Arg Lys Thr Lys His Phe Ser Lys Ser His Leu Glu Ser Phe Asn Pro Phe Met Ser Val Ser Ala Lys Phe Ser Cys Gly Leu Ala Gly Leu Leu Cys Ser Val Pro Glu Arg Ala Gly Leu Ser Leu Gly Ile Cys Arg His Pro Leu Trp His Ser Ala Gly Thr Leu Ser Ser Asn Leu Leu Ala Pro Ser Ala Arg Trp Asp His

<210> 3327

<211> 184

<212> PRT

<213> Homo sapiens

<400> 3327

Met Tyr Phe Tyr Asp Gly Val Ser Arg Asp Ala Ala Ser Ala Ala Leu

1 5 10 15

Ala Asp Ala Ala Glu Glu Leu Leu Asp Arg Leu Ala Ser His Ser Met

20 25 30

Leu Pro Ser Asp Val Ser IIe Leu Tyr His Met Lys Thr Leu Leu Leu

35 40 45

Leu Gln Asp Thr Glu Arg Leu Lys His Ala Leu Glu Met Phe Pro Glu
50 55 60

His Cys Thr Met Pro Pro Gly Gly Lys Ser Glu Ala Gln Arg Ala Trp 65 70 75 80

Ala Asn Gly Thr Gly His Thr Ala His Gln Trp Leu His Val Ser Ser

85 90 95

Asp Leu Gly Leu Leu Ser Val Phe Pro Ile Ser Met Thr Leu Thr
100 105 110

Asp Ala Gly Val Gln Gly Tyr Val His Pro Arg Pro Ala Gly Ala Gln
115 120 125

Ser Thr Glu Ala Trp Pro Ser Glu Glu Thr Glu Gly Ser Val Gly His
130 135 140

His Gly Thr Ala Arg Val Gly Val Pro Glu Gly Pro Ser Trp Pro Trp 165 170 175

Lys Val Pro Tyr Ser Arg Gln Glu 180

<210> 3328

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3328

Met Gly Ser Val Phe Leu Gly Lys Ser Gly Leu Leu Cys Lys Ala Pro 1 5 10 15 Ala Leu Pro Asp Ser Ser Pro Asn Thr Arg Ala Lys Val Gly Val Leu 25 20 30 Phe Leu Pro Leu Leu Pro Pro Asn Asp Leu Glu Gly Ile Cys Val Pro 35 40 45 Ala Val Pro Phe Pro Ala Thr Phe Ala Pro Gly Asn Ser Pro Pro His 50 55 60 Thr Ser Pro His Leu Ile Gly Asn Phe Pro Leu Pro Asp Leu Arg Ser 70 75 65 80 Ile Ser Thr Pro Ser Leu Gln Asn Gly Asp Asn Glu Leu Thr Lys Ser 95 85 90 Met Phe Asn Thr Leu Leu Thr Glu Leu Thr Met Ile Leu Gly Gly Ser 100 105 110 Gly Met

<210> 3329

<211> 326

<212> PRT

<213> Homo sapiens

<400> 3329

Met Lys Cys Thr Ala Val Leu Cys Cys Arg Met Ala Pro Leu Gln Lys

1 5 10 15

Ala Gln Ile Val Arg Met Val Lys Asn Leu Lys Gly Ser Pro Ile Thr
20 25 30

Leu Ser Ile Gly Asp Gly Ala Asn Asp Val Ser Met Ile Leu Glu Ser

		35					40					45			
His	Val	Gly	Ile	Gly	Ile	Lys	Gly	Lys	Glu	Gly	Arg	Gln	Ala	Ala	Arg
	50					55					60				
Asn	Ser	Asp	Tyr	Ser	Val	Pro	Lys	Phe	Lys	His	Leu	Lys	Lys	Leu	Leu
65					70					75					80
Leu	Ala	His	Gly	His	Leu	Tyr	Tyr	Val	Arg	Ile	Ala	His	Leu	Val	Gln
				85					90					95	
Tyr	Phe	Phe	Tyr	Lys	Asn	Leu	Cys	Phe	Ile	Leu	Pro	Gln	Phe	Leu	Tyr
			100	•				105					110		
Gln	Phe	Phe	Cys	Gly	Phe	Ser	Gln	Gln	Pro	Leu	Tyr	Asp	Ala	Ala	Tyr
		115					120					125			
Leu	Thr	Met	Tyr	Asn	Ile	Cys	Phe	Thr	Ser	Leu	Pro	Ile	Leu	Ala	Tyr
	130					135					140				
Ser	Leu	Leu	Glu	Gln	His	Ile	Asn	Ile	Asp	Thr	Leu	Thr	Ser	Asp	Pro
145					150					155					160
Arg	Leu	Tyr	Met	Lys	Ile	Ser	Gly	Asn	Ala	Met	Leu	Gln	Leu	Gly	Pro
				165					170					175	
Phe	Leu	Tyr	Trp	Thr	Phe	Leu	Ala	Ala	Phe	Glu	Gly	Thr	Val	Phe	Phe
			180					185					190		
Phe	Gly	Thr	Tyr	Phe	Leu	Phe	Gln	Thr	Ala	Ser	Leu	Glu	Glu	Asn	Gly
		195					200					205			
Lys	Val	Tyr	Gly	Asn	Trp	Thr	Phe	Gly	Thr	Ile	Val	Phe	Thr	Val	Leu
	210					215					220				
Val	Phe	Thr	Val	Thr	Leu	Lys	Leu	Ala	Leu	Asp	Thr	Arg	Phe	Trp	Thr
225					230					235					240
Trp	Ile	Asn	His	Phe	Val	Ile	Trp	Gly	Ser	Leu	Ala	Phe	Tyr	Val	Phe
				245					250					255	
Phe	Ser	Phe	Phe	Trp	Gly	Gly	Ile	Ile	Trp	Pro	Phe	Leu	Lys	Gln	Gln
			260					265					270		

Arg Met Tyr Phe Val Phe Ala Gln Met Leu Ser Ser Val Ser Thr Trp Leu Ala Ile Ile Leu Leu Ile Phe Ile Ser Leu Phe Pro Glu Ile Leu Leu Ile Val Leu Lys Asn Val Arg Arg Ser Ala Arg Val His His Leu Ile Ser Ser Ser Ala <210> 3330 <211> 913 <212> PRT <213> Homo sapiens

<400> 3330

Met Pro Gly Glu Ala Val Glu Tyr His Ser Ile Gln Leu Ile Arg Asp Glu Phe Leu Met Asn Val Gln Lys Phe Ala Ser Asn Ile Gln Arg Thr Met Gln Gln Leu Glu Gly Glu Ile Lys Leu Glu Met Pro Ile Ile Ser Val Glu Gly Glu Val Ser Asp Leu Ala Ala Asp Pro Glu Thr Val Asp Ile Leu Glu Gln Cys Val Ile Asn Trp Leu Asn Gln Ile Ser Thr Ala Val Glu Ala Gln Leu Lys Lys Thr Pro Gln Gly Lys Gly Pro Leu Ala

Glu Ile Glu Phe Trp Arg Glu Arg Asn Ala Thr Leu Ser Ala Leu His

			100					105					110		
Glu	Gln	Thr	Lys	Leu	Pro	Ile	Val	Arg	Lys	Val	Leu	Asp	Val	Ile	Lys
		115					120					125			
Glu	Ser	Asp	Ser	Met	Leu	Val	Ala	Asn	Leu	Gln	Pro	Val	Phe	Thr	Glu
	130					135					140				
Leu	Phe	Lys	Phe	His	Thr	Glu	Ala	Ser	Asp	Asn	Val	Arg	Phe	Leu	Ser
145					150					155					160
Thr	Val	Glu	Arg	Tyr	Phe	Lys	Asn	Ile	Thr	His	Gly	Ser	Gly	Phe	His
				165					170					175	
Val	Val	Leu	Asp	Thr	Ile	Pro	Ala	Met	Met	Ser	Ala	Leu	Arg	Met	Val
			180					185					190		
Trp	Ile	Ile	Ser	Arg	His	Tyr	Asn	Lys	Asp	Glu	Arg	Met	Ile	Pro	Leu
		195					200		•			205			
Met	Glu	Arg	Ile	Ala	Trp	Glu	Ile	Ala	Glu	Arg	Val	Cys	Arg	Val	Val
	210					215					220				
Asn	Leu	Arg	Thr	Leu	Phe	Lys	Glu	Asn	Arg	Ala	Ser	Ala	Gln	Ser	Lys
225					230					235					240
Thr	Leu	Glu	Ala	Arg	Asn	Thr	Leu	Arg	Leu	Trp	Lys	Lys	Ala	Tyr	Phe
				245					250					255	
Asp	Thr	Arg	Ala	Lys	Ile	Glu	Ala	Ser	Gly	Arg	Glu	Asp	Arg	Trp	Glu
			260					265					270		
Phe	Asp	Arg	Lys	Arg	Leu	Phe	Glu	Arg	Thr	Asp	Tyr	Met	Ala	Thr	Ile
		275					280					285			
Cys	Gln	Asp	Leu	Ser	Asp	Val	Leu	Gln	Val	Leu	Glu	Glu	Phe	Tyr	Asn
	290					295					300				
Ile	Phe	Gly	Pro	Glu	Leu	Lys	Ala	Val	Thr	Gly	Asp	Pro	Lys	Arg	Ile
305					310					315					320
Asp	Asp	Val	Leu	Cys	Arg	Val	Asp	Gly	Leu	Val	Thr	Pro	Met	Glu	Asn
				325					330					335	

Leu	Thr	Phe	Asp	Pro	Phe	Ser	Ile	Lys	Ser	Ser	Gln	Phe	Trp	Lys	Tyr
			340					345					350		
Val	Met	Asp	Glu	Phe	Lys	Ile	Glu	Val	Leu	Ile	Asp	Ile	Ile	Asn	Lys
		355					360					365			
Ile	Phe	Val	Gln	Asn	Leu	Glu	Asn	Pro	Pro	Leu	Tyr	Lys	Asn	His	Pro
	370					375					380				
Pro	Val	Ala	Gly	Ala	Ile	Tyr	Trp	Glu	Arg	Ser	Leu	Phe	Phe	Arg	Ile
385					390					395					400
Lys	His	Thr	Ile	Leu	Arg	Phe	Gln	Glu	Val	Gln	Glu	Ile	Leu	Asp	Ser
•				405					410					415	
Asp	Arg	Gly	Gln	Glu	Val	Lys	Gln	Lys	Tyr	Leu	Glu	Val	Gly	Arg	Thr
			420					425					430		
Met	Lys	Glu	Tyr	Glu	Asp	Arg	Lys	Tyr	Glu	Gln	Trp	Met	Glu	Val	Thr
		435					440					445			
Glu	Gln	Val	Leu	Pro	Ala	Leu	Met	Lys	Lys	Ser	Leu	Leu	Thr	Lys	Ser
	450					455					460				
Ser	Ile	Ala	Thr	Glu	Glu	Pro	Ser	Thr	Leu	Glu	Arg	Gly	Ala	Val	Phe
465					470					475					480
Ala	Ile	Asn	Phe	Ser	Pro	Ala	Leu	Arg	Glu	Ile	Ile	Asn	Glu	Thr	Lys
				485					490					495	
Tyr	Leu	Glu	Gln	Leu	Gly	Phe	Thr	Val	Pro	Glu	Leu	Ala	Arg	Asn	Val
			500					505	•				510		
Ala	Leu	Gln	Glu	Asp	Lys	Phe	Leu	Arg	Tyr	Thr	Ala	Gly	Ile	Gln	Arg
		515					520					525			
Met	Leu	Asp	His	Tyr	His	Met	Leu	Ile	Gly	Thr	Leu	Asn	Asp	Ala	Glu
	530					535					540				
Ser	Val	Leu	Leu	Lys	Asp	His	Ser	Gln	Glu	Leu	Leu	Arg	Val	Phe	Arg
545					550					555					560
Ser	Glv	Tyr	Lys	Arg	Leu	Asn	Trp	Asn	Ser	Leu	Glv	Ile	Glv	Asp	Tyr

				565					570					575	
Ile	Thr	Gly	Cys	Lys	Gln	Ala	Ile	Gly	Lys	Phe	Glu	Ser	Leu	Val	His
			580					585					590		
Gln	Ile	His	Lys	Asn	Ala	Asp	Asp	Ile	Ser	Ser	Arg	Leu	Thr	Leu	Ile
		595					600					605			
Glu	Ala	Ile	Asn	Leu	Phe	Lys	Tyr	Pro	Ala	Ala	Lys	Ser	Glu	Glu	Glu
	610					615					620				
Leu	Pro	Gly	Val	Lys	Glu	Phe	Phe	Glu	His	Ile	Glu	Arg	Glu	Arg	Ala
625					630					635					640
Ser	Asp	Val	Asp	His	Met	Val	Arg	Trp	Tyr	Leu	Ala	Ile	Gly	Pro	Leu
				645					650					655	
Leu	Thr	Lys	Val	Glu	Gly	Leu	Val	Val	His	Thr	Asn	Thr	Gly	Lys	Ala
			660					665					670		
Pro	Lys	Leu	Ala	Ser	Tyr	Tyr	Lys	Tyr	Trp	Glu	Lys	Lys	Ile	Tyr	Glu
		675					680					685			
Val	Leu	Thr	Lys	Leu	Ile	Leu	Lys	Asn	Leu	Gln	Ser	Phe	Asn	Ser	Leu
	690					695					700				
Ile	Leu	Gly	Asn	Val	Pro	Leu	Phe	His	Thr	Glu	Thr	Ile	Leu	Thr	Ala
705					710					715					720
Pro	Glu	Ile	Ile		His	Pro	Asn	Thr		Glu	Ile	Asp	Lys		Cys
				725					730		_			735	
Phe	His	Cys		Arg	Asn	Cys	Val		Ile	Thr	Lys	His	Phe	Val	Arg
m.	.,		740		C	т,	0.	745	ъ	D	01	•	750	01	01
Trp	Met		Gly	Ser	Cys	He		Cys	Pro	Pro	Gln		Gly	Glu	Glu
0.	01	755	. .	т,	т,		760	T.			т,	765	τ		D
Glu		Val	Val	He	He		Phe	Tyr	Asn	Asp		Ser	Leu	Asn	Pro
01	770	T 1	01	61	A 1	775	\	т,	D	C1	780	77 1			T.1
	He	He	Glu	Gln		Val	Met	He	Pro		Asn	Val	His	Arg	
785					790					795					800

Leu Ile Asn Leu Met Lys Tyr Leu Gln Lys Trp Lys Arg Tyr Arg Pro 805 810 815 Leu Trp Lys Leu Asp Lys Ala Ile Val Met Glu Lys Phe Ala Ala Lys 825 820 830 Lys Pro Pro Cys Val Ala Tyr Asp Glu Lys Leu Gln Phe Tyr Ser Lys 835 840 845 Ile Ala Tyr Glu Val Met Arg His Pro Leu Ile Lys Asp Glu His Cys 850 855 860 Ile Arg Leu Gln Leu Arg His Leu Ala Asn Thr Val Gln Glu Asn Ala 870 875 880 865 Lys Ser Trp Val Ile Ser Leu Gly Lys Leu Leu Asn Glu Ser Ala Lys 885 890 895 Glu Glu Leu Tyr Asn Leu His Glu Glu Met Glu Val Leu Asn Arg Cys 900 905 910 Val

<210> 3331

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3331

Met Leu Leu Pro Phe Ile Arg Thr Leu Pro Leu Leu Cys Tyr Asn His

1 5 10 15

Leu Leu Val Ser Pro Asp Ser Ala Thr Leu Ser Pro Pro Tyr Ser Leu
20 25 30

Glu Lys Met Thr Asp Leu Val Ala Val Trp Asp Val Ala Leu Ser Asp

Gly Val His Lys Ile Glu Phe Glu His Gly Thr Thr Ser Gly Lys Arg Val Val Tyr Val Asp Gly Lys Glu Glu Ile Arg Lys Glu Trp Met Phe Lys Leu Val Gly Lys Glu Thr Phe Tyr Val Gly Ala Ala Lys Thr Lys Ala Thr Ile Asn Ile Asp Ala Ile Ser Gly Phe Ala Tyr Glu Tyr Thr Leu Glu Ile Asn Gly Lys Ser Leu Lys Lys Tyr Met Glu Asp Arg Ser Lys Thr Thr Asn Thr Trp Val Leu His Met Asp Gly Glu Asn Phe Arg Ile Val Leu Glu Lys Asp Ala Met Asp Val Trp Cys Asn Gly Lys Lys Leu Glu Thr Ala Val Ser <210> 3332 <211> 129 <212> PRT <213> Homo sapiens

<400> 3332
Met Leu Trp Tyr Glu Leu Pro Gly Tyr Leu Arg Leu Pro Cys Lys Gln
1 5 10 15
Leu Trp Pro Asp Trp Val Pro Gly Arg Gly Gln Gln Thr Lys Glu Cys
20 25 30

Ser Val Gly Pro Ala Ser Ser Asp Leu Gln Asp His Pro Ala Glu Ile 40 35 45 Arg Pro Asn Ser Ser Arg Arg Ala Lys Val Ser Tyr Gly Arg Gln Leu 55 50 60 Ser Leu Glu Lys Trp Pro Ser Leu Ala Thr Leu Tyr Tyr Arg Cys Ser 70 75 65 80 Cys Thr Lys Pro Ser Gly His His Met Ser Trp Leu Ala Ala Leu Ser 85 90 95 Leu Cys Leu Ser Ser Gly Gly Cys Ile Ser Glu Arg Cys Arg Ser Ala 100 105 110 Ile Thr Gln Cys Ser Gln Pro Arg Met Glu Asp Leu Tyr Phe Trp Pro 115 120 125 Ser <210> 3333 <211> 116 <212> PRT

<400> 3333

<213> Homo sapiens

Met Pro Cys Thr Pro Pro Pro Pro Pro Pro Pro Pro His Ile Arg Leu Ala

1 5 10 15

Ala Gly Ser Leu Glu Ala Ala Arg Leu Thr Pro Pro Arg Gly Pro Gly
20 25 30

Pro Met Ala Gly Ile Arg Ser Arg Pro Pro Ala Cys Thr Ser Glu Gln
35 40 45

Arg Gln Ala Gln Leu Ala Ala Thr His Pro Pro Leu Ala Ala Gly Arg

Pro Cys Ser Val Ser Trp Ser Phe Pro Arg Pro Cys Gly Pro Leu Thr Ala Pro Leu Leu Cys Leu His Arg Ser Leu Arg Ala Leu Leu Ala Ser Ala Pro His Thr Ser Ala Ala Ala Trp Cys Arg Thr Leu Gly Arg Tyr Pro Pro Pro <210> 3334 <211> 168 <212> PRT <213> Homo sapiens <400> 3334 Met Ala Asn Arg Asp Ser Ala Ser Pro His Ser Pro Pro Arg Arg Arg Arg Cys Leu Gly Gly Pro Thr Val Leu Pro Leu Arg Lys Ile His Ala Gly Cys Tyr Gly Pro Gln Pro Pro His Arg His Pro Arg Pro Leu His Thr Val Ser Leu Pro Ser Pro Asn Thr Leu Leu Pro Gln Pro Gly Asp Pro Trp Met Glu Asp Trp Ala Ser Gln Ser Gly Arg Gln Asp Gln Arg

Val Cys Glu His Thr Cys Val Pro Ala Asp Met Pro Gln Asp Pro Arg

Asp Ala Pro Ala Pro Val Thr Trp Cys Gln Ser Tyr Leu Gly Asn Trp 100 105 110 Pro Phe Trp Phe Arg Val Asn Trp Glu Val Lys Pro Leu Gly Phe Val 120 125 115 Glu Lys Arg Thr Val Arg Glu Met Leu Cys His Leu Val Arg Lys Thr 135 140 130 Phe Phe Leu Ser Ser Lys Ile Met Met Gly Phe Phe Trp Ile Cys Phe 145 150 155 160 Thr Asn Lys Ser Asp Trp Ser Ile 165

<210> 3335

<211> 343

<212> PRT

<213> Homo sapiens

<400> 3335

Met Val Thr Gly Arg Arg Glu Asp Val Ala Thr Ala Arg Arg Glu Ile

1 5 10 15

Ile Ser Ala Ala Glu His Phe Ser Met Ile Arg Ala Ser Arg Asn Lys
20 25 30

Ser Gly Ala Ala Phe Gly Val Ala Pro Ala Leu Pro Gly Gln Val Thr
35 40 45

Ile Arg Val Arg Val Pro Tyr Arg Val Val Gly Leu Val Val Gly Pro
50 55 60

Lys Gly Ala Thr Ile Lys Arg Ile Gln Gln Gln Thr Asn Thr Tyr Ile
65 70 75 80

Ile Thr Pro Ser Arg Asp Arg Asp Pro Val Phe Glu Ile Thr Gly Ala

				85					90					95	
Pro	Gly	Asn	Val	Glu	Arg	Ala	Arg	Glu	Glu	Ile	Glu	Thr	His	Ile	Ala
			100					105					110		
Val	Arg	Thr	Gly	Lys	Ile	Leu	Glu	Tyr	Asn	Asn	Glu	Asn	Asp	Phe	Leu
		115					120					125			
Ala	Gly	Ser	Pro	Asp	Ala	Ala	Ile	Asp	Ser	Arg	Tyr	Ser	Asp	Ala	Trp
	130					135					140				
Arg	Val	His	Gln	Pro	Gly	Cys	Lys	Pro	Leu	Ser	Thr	Phe	Arg	Gln	Asn
145					150					155					160
Ser	Leu	Gly	Cys	Ile	Gly	Glu	Cys	Gly	Val	Asp	Ser	Gly	Phe	Glu	Ala
				165					170					175	
Pro	Arg	Leu	Gly	Glu	Gln	Gly	Gly	Asp	Phe	Gly	Tyr	Gly	Gly	Tyr	Leu
			180					185					190		
Phe	Pro	Gly	Tyr	Gly	Val	Gly	Lys	Gln	Asp	Val	Tyr	Tyr	Gly	Val	Ala
		195					200					205			
Glu	Thr	Ser	Pro	Pro	Leu	Trp	Ala	Gly	Gln	Glu	Asn	Ala	Thr	Pro	Thr
	210					215					220				
Ser	Val	Leu	Phe	Ser	Ser	Ala	Ser	Ala	Lys						
225					230					235					240
Ala	Arg	Ala	Gly	Pro	Pro	Gly	Ala	His	Arg	Ser	Pro	Ala	Thr	Ser	Ala
				245					250					255	
Gly	Pro	Glu	Leu	Ala	Gly	Leu	Pro	Arg	Arg	Pro	Pro	Gly	Glu	Pro	Leu
			260					265					270		
Gln	Gly	Phe	Ser	Lys	Leu	Gly	Gly	Gly	Gly	Leu	Arg	Ser	Pro	Gly	Gly
		275					280					285			
Gly	Arg	Asp	Cys	Met	Val	Cys	Phe	Glu	Ser	Glu	Val	Thr	Ala	Ala	Leu
	290					295					300				
Val	Pro	Cys	Gly	His	Asn	Leu	Phe	Cys	Met	Glu	Cys	Ala	Val	Arg	Ile
305					310					315					320

Cys Glu Arg Thr Asp Pro Glu Cys Pro Val Cys His Ile Thr Ala Thr
325 330 335

Gln Ala Ile Arg Ile Phe Ser 340

<210> 3336

<211> 125

<212> PRT

<213> Homo sapiens

<400> 3336

Met Asp Ala Ala Val Thr Asp Asp Phe Gln Gln Ile Leu Pro Ile Glu

1 5 10 15

Gln Leu Arg Ser Thr His Ala Ser Asn Asp Tyr Val Glu Arg Pro Pro
20 25 30

Ala Pro Cys Lys Gln Ala Leu Ser Ser Pro Ser Leu Ile Val Gln Thr
35 40 45

His Lys Ser Asp Trp Ser Leu Ala Thr Met Pro Thr Ser Leu Pro Arg
50 55 60

Ser Leu Ser Gln Cys His Gln Leu Gln Pro Leu Pro Gln His Leu Ser
65 70 75 80

Gln Ser Ser Ile Ala Ser Ser Met Ser His Ser Thr Thr Ala Ser Ser

85 90 95

Thr Thr Ala Pro Leu Met Met Lys Thr Thr Val Leu Met Ser Pro Ala 100 105 110

Leu Val Gly Leu Val Leu Ala Leu Ser Ala Gly Gln Pro 115 120 125 <210> 3337

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3337

Met Cys Val Tyr Thr Tyr Ile Cys Glu Tyr Arg Cys Ile Tyr Val Cys

1 5 10 15

Ile Tyr Ile His Val Phe Val Tyr Val Cys Tyr Ile Tyr Leu Tyr Val
20 25 30

Tyr Val Cys Val Ile Tyr Ile His Val Cys Val Cys Val Leu
35 40 45

Tyr Ile His Val Cys Val Tyr Val Cys Val Tyr Ala Leu Arg Arg Gln
50 55 60

Asn Cys Pro Glu Glu Gly Trp Tyr Leu Gly Phe Pro Ser Pro Ser Leu 65 70 75 80

Cys His Leu Val Pro Asn Arg Ala Asn Gly Pro Ser Leu Gln Thr Glu 85 90 95

Ala Glu Ser Pro Gly Leu Gly Arg Gly Asp Arg Gly Thr Gly Gln Pro
100 105 110

Gln Trp Gly Thr Gly Asp Pro Gly Leu His Pro Asn Thr Gly Thr Arg 115 120 125

Asp Arg Cys His Glu Leu Leu Leu Glu Pro Ser Ala Gln Gly Ser 130 135 140

Gly Leu Tyr Pro

<210> 3338 <211> 172 <212> PRT <213> Homo sapiens <400> 3338 Met Asn Ala Val Gly Cys Cys Gly Leu Gln Leu Tyr Lys Phe Gly Glu Thr Val Ser Ile Val Phe Trp Thr Asp Thr Trp Arg Pro Glu Ser Phe Phe Asp Lys Val Lys Lys Asn Arg Gln Asn Gly Met His Thr Leu Cys Leu Leu Asp Ile Lys Val Lys Glu Gln Ser Leu Glu Asn Leu Ile Lys Gly Arg Lys Ile Tyr Glu Pro Pro Arg Tyr Met Ser Val Asn Gln Ala Ala Gln Gln Leu Leu Glu Ile Val Gln Asn Gln Arg Ile Arg Gly Glu Glu Pro Ala Val Thr Glu Glu Thr Leu Cys Val Gly Leu Ala Arg Val Gly Ala Asp Asp Gln Lys Ile Ala Ala Gly Thr Leu Arg Gln Met Cys Thr Val Asp Leu Gly Glu Pro Leu His Ser Leu Ile Ile Thr Gly Gly

Glu Asn Ser Ser Glu Ser Gln Ser Ile Asn Gly Leu 165 170

Ser Ile His Pro Met Glu Met Glu Met Leu Ser Leu Phe Ser Ile Pro

<210> 3339

<211> 135

<212> PRT

<213> Homo sapiens

<400> 3339

Met His Leu Thr Ser Pro Pro Val Leu Arg Thr Pro Cys Cys Ser Gly

1 5 10 15

His Arg Val Ser Gln Gln Trp His Ile Asp Thr Trp Ala Arg Glu Phe
20 25 30

Phe Ala Ala Gly Gly Gly Gly Pro Val Cys Cys Arg Leu Leu Cys
35 40 45

Gly Ser Phe Ser Leu Cys Pro Leu Ile Glu Ala Pro Leu Pro Trp Leu 50 55 60

Gln Pro Lys Met Ser Pro Asp Ile Ala Lys Cys Pro Gly Ala Gly Ala 65 70 75 80

Arg Gly Thr Met Ser Pro Leu Thr His Leu Glu Asn His Cys Tyr Lys
85 90 95

Arg Thr Gly Thr Ala Lys Glu Ala Ile Ile Ser Arg Lys Ser Cys Cys
100 105 110

Arg Phe Ser Leu Asn Lys Gly Val Ser Ile Leu Arg Asn Pro Pro Lys
115 120 125

Asp Cys Trp Pro Ser Leu Ser 130 135

<210> 3340

<211> 477

<212> PRT

<213> Homo sapiens

<400> 3340

Met Phe Ser Ile Thr Leu Ile Asn His Phe Asp Leu Ser Ile Leu Ile 1 5 10 15

Thr Thr Met Val Leu Val Pro Ser Tyr Thr Leu Leu Gly Phe Lys Thr
20 25 30

Phe Leu Glu Val Arg Asp Gln Glu His Tyr Arg Glu Phe Pro Glu Ala
35 40 45

Asn Phe Glu Leu Ser Ala Thr Asp Phe Leu Val Cys Phe Ile Pro Tyr
50 55 60

Phe Gln Thr Leu Leu Phe Val Phe Val Leu Arg Cys Met Glu Leu Lys 65 70 75 80

Cys Gly Lys Lys Arg Met Arg Lys Asp Pro Val Phe Arg Ile Ser Pro 85 90 95

Gln Ser Arg Asp Ala Lys Pro Asn Pro Glu Glu Pro Ile Asp Glu Asp 100 105 110

Glu Asp Ile Gln Thr Glu Arg Ile Arg Thr Ala Thr Ala Leu Thr Thr
115 120 125

Ser Ile Leu Asp Glu Lys Pro Val Ile Ile Ala Ser Cys Leu His Lys 130 135 140

Glu Tyr Ala Gly Gln Lys Lys Ser Cys Phe Ser Lys Arg Lys Lys Lys 145 150 155 160

Ile Ala Ala Arg Asn Ile Ser Phe Cys Val Gln Glu Gly Glu Ile Leu 165 170 175

Gly Leu Leu Gly Pro Asn Gly Ala Gly Lys Ser Ser Ser Ile Arg Met 180 185 190

Ile Ser Gly Ile Thr Lys Pro Thr Ala Gly Glu Val Glu Leu Lys Gly

		195					200					205			
Cys	Ser	Ser	Val	Leu	Gly	His	Leu	Gly	Tyr	Cys	Pro	Gln	Glu	Asn	Val
	210					215					220				
Leu	Trp	Pro	Met	Leu	Thr	Leu	Arg	Glu	His	Leu	Glu	Val	Tyr	Ala	Ala
225					230					235					240
Val	Lys	Gly	Leu	Arg	Lys	Ala	Asp	Ala	Arg	Leu	Ala	Ile	Ala	Arg	Leu
				245					250					255	
Val	Ser	Ala	Phe	Lys	Leu	His	Glu	Gln	Leu	Asn	Val	Pro	Val	Gln	Lys
			260					265					270		
Leu	Thr	Ala	Gly	Ile	Thr	Arg	Lys	Leu	Cys	Phe	Val	Leu	Ser	Leu	Leu
		275					280					285			
Gly	Asn	Ser	Pro	Val	Leu	Leu	Leu	Asp	Glu	Pro	Ser	Thr	Gly	Ile	Asp
	290					295					300				
Pro	Thr	Gly	Gln	Gln	Gln	Met	Trp	Gln	Ala	Ile	Gln	Ala	Val	Val	Lys
305					310					315					320
Asn	Thr	Glu	Arg	Gly	Val	Leu	Leu	Thr	Thr	His	Asn	Leu	Ala	Glu	Ala
				325					330					335	
Glu	Ala	Leu	Cys	Asp	Arg	Val	Ala	Ile	Met.	Val	Ser	Gly	Arg	Leu	Arg
			340					345					350		
Cys	Ile	Gly	Ser	Ile	Gln	His	Leu	Lys	Asn	Lys	Leu	Gly	Lys	Asp	Tyr
		355					360					365			
Ile	Leu	Glu	Leu	Lys	Val	Lys	Glu	Thr	Ser	Gln	Val	Thr	Leu	Val	His
	370					375					380				
Thr	Glu	Ile	Leu	Lys	Leu	Phe	Pro	Gln	Ala	Ala	Gly	Gln	Glu	Arg	Tyr
385					390					395					400
Ser	Ser	Leu	Leu	Thr	Tyr	Lys	Leu	Pro	Val	Ala	Asp	Val	Tyr	Pro	Leu
		•		405					410					415	
Ser	Gln	Thr	Phe	His	Lys	Leu	Glu	Ala	Val	Lys	His	Asn	Phe	Asn	Leu
			420					425					430		

Gly Glu Tyr Ser Leu Ser Gln Cys Thr Leu Glu Lys Val Phe Leu Glu
435

Leu Ser Lys Glu Gln Glu Val Gly Asn Phe Asp Glu Glu Ile Asp Thr
450

Thr Met Arg Trp Lys Leu Leu Pro His Ser Asp Glu Pro
465

470

475

<210> 3341

<211> 181

<212> PRT

<213> Homo sapiens

<400> 3341

Met Gly Asn Pro Ile Leu Gln Gln His Tyr Ile Arg Glu Ala Thr Met

1 5 10 15

Glu Gln Gly Thr Arg Pro Lys Lys Pro Pro Cys Ala Tyr Ser Thr Val
20 25 30

His Arg Val Pro Ser Ala Pro Glu Gly Pro Cys Pro Pro Thr Ser Thr
35 40 45

Ala Pro Ser Ser Gly Pro Pro Arg Ala Leu Gly Arg Phe Leu Cys Gln
50 55 60

Thr Ser Pro Ala Thr His Ser Ser Gly Ser Arg Ala Pro Pro Pro Gln 65 70 75 80

Gln Gln Ser Ser Arg Asp Leu Pro Gln Gly Arg Ser Pro Ala Pro Gly
85 90 95

Trp Lys Ala Ala Glu Leu Trp Arg Arg Gly Thr Gln Arg Thr Ala Gly
100 105 110

Arg Ala Cys Pro Arg Leu Pro Ala Arg Pro Glu Gly Ser Ala Arg Ser

Lys Asn Gln Lys Ser Ser Met Arg Ser Pro Ala Gly Arg Arg Gly Val Ala Gln Pro Val Leu Ile Leu Ser Trp Arg Lys Pro Ser Gly Arg Val Leu Gly Arg Thr Arg Leu Pro Pro Arg Leu Leu Ser Ala Ala Cys Pro Ala Arg Thr Ser Val <210> 3342 <211> 117 <212> PRT <213> Homo sapiens <400> 3342 Met Glu Phe His His Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser

Ser Asp Leu Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser His Cys Ala Trp Thr Ile Phe Thr Phe Phe Phe Glu Thr Glu Ser Cys Ser Val Thr Gln Thr Glu Val Gln Trp Arg Arg Leu Gly Ser Leu Gln Ala Pro Leu Pro Gly Phe Thr Pro Phe Ser Cys Leu Ser Leu Pro Asn Ser Trp Asp Tyr Arg Arg Pro Pro Pro Phe Leu Ala Asn Phe Phe

Val Phe Leu Val Ala Met Gly Phe His His Val Ser Gln Asp Gly Leu
100 105 110

Asp Ile Leu Thr Ser

115

<210> 3343

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3343

Met Cys His His Ala Trp Leu Ile Phe Ile Phe Leu Val Glu Thr Gly

1 5 10 15

Phe His His Val Val Gln Ala Gly Leu Lys Leu Leu Thr Ser Gly Asp
20 25 30

Leu Pro Thr Ser Ala Ser Gln Gly Ala Gly Ile Thr Gly Met Ser His

35 40 45

His Ala Trp Pro Phe Leu Thr Leu Leu Tyr Asp Met Pro Ile Ala Ser 50 55 60

Leu Arg Ala Ser Val Pro Cys Tyr Phe Thr Leu Gly Phe Arg Trp Arg 65 70 75 80

Glu Gln Leu Leu Phe Gly Thr Leu Ala Ile Ala Trp Gln Met Gly Ile 85 90 95

Cys His Phe Cys Ser Tyr Leu Val Gly Ser Thr Ile Thr Phe Arg Ala 100 105 110

Asn Pro Ala Ala Lys Pro Gly Ile Asn Arg Ala Glu Lys Tyr Ile Leu 115 120 125 <210> 3344

<211> 752

<212> PRT

<213> Homo sapiens

<400> 3344

Met Glu Thr Val Val Ala Gly Gly Ser Gly Gly Asp Gly Glu Glu Glu

1 5 10 15

Glu Glu Ala Leu Pro Glu Gln Ser Glu Gly Lys Glu Gln Lys Ile Leu 20 25 30

Leu Asp Thr Ala Cys Lys Met Val Arg Trp Leu Ser Ala Lys Leu Gly
35 40 45

Pro Thr Val Ala Ser Arg His Val Ala Arg Asn Leu Leu Arg Leu Leu 50 55 60

Thr Ser Cys Tyr Val Gly Pro Thr Arg Gln Gln Phe Thr Val Ser Ser 65 70 75 80

Gly Glu Ser Pro Pro Leu Ser Ala Gly Asn Ile Tyr Gln Lys Arg Pro 85 90 95

Val Leu Gly Asp Ile Val Ser Gly Pro Val Leu Ser Cys Leu Leu His

100 105 110

Ile Ala Arg Leu Tyr Gly Glu Pro Val Leu Thr Tyr Gln Tyr Leu Pro
115 120 125

Tyr Ile Ser Tyr Leu Val Ala Pro Gly Ser Ala Ser Gly Pro Ser Arg 130 135 140

Leu Asn Ser Arg Lys Glu Ala Gly Leu Leu Ala Ala Val Thr Leu Thr 145 150 155 160

Gln Lys Ile Ile Val Tyr Leu Ser Asp Thr Thr Leu Met Asp Ile Leu 165 170 175

Pro	Arg	He	Ser	His	Glu	Val	Leu	Leu	Pro	Val	Leu	Ser	Phe	Leu	Thr
			180				-	185					190		
Ser	Leu	Val	Thr	Gly	Phe	Pro	Ser	Gly	Ala	Gln	Ala	Arg	Thr	Ile	Leu
		195					200					205			
Cys	Val	Lys	Thr	Ile	Ser	Leu	Ile	Ala	Leu	Ile	Cys	Leu	Arg	Ile	Gly
	210					215					220				
Gln	Glu	Met	Val	Gln	Gln	His	Leu	Ser	Glu	Pro	Val	Ala	Thr	Phe	Phe
225					230					235					240
Gln	Val	Phe	Ser	Gln	Leu	His	Glu	Leu	Arg	Gln	Gln	Asp	Leu	Lys	Leu
				245					250					255	
Asp	Pro	Ala	Gly	Arg	Gly	Glu	Gly	Gln	Leu	Pro	Gln	Val	Val	Phe	Ser
			260					265					270		
Asp	Gly	Gln	Gln	Arg	Pro	Val	Asp	Pro	Ala	Leu	Leu	Asp	Glu	Leu	Gln
		275					280					285			
Lys	Val	Phe	Thr	Leu	Glu	Met	Ala	Tyr	Thr	Ile	Tyr	Val	Pro	Phe	Ser
	290					295					300				
Cys	Leu	Leu	Gly	Asp	Ile	Ile	Arg	Lys	Ile	Ile	Pro	Asn	His	Glu	Leu
305					310					315					320
Val	Gly	Glu	Leu	Ala	Ala	Leu	Tyr	Leu	Glu	Ser	Ile	Ser	Pro	Ser	Ser
				325				•	330					335	
Arg	Asn	Pro	Ala	Ser	Val	Glu	Pro	Thr	Met	Pro	Gly	Thr	Gly	Pro	Glu
			340					345					350		
Trp	Asp	Pro	His	Gly	Gly	Gly	Cys	Pro	Gln	Asp	Asp	Gly	His	Ser	Gly
		355					360					365			
Thr	Phe	Gly	Ser	Val	Leu	Val	Gly	Asn	Arg	Ile	Gln	Ile	Pro	Asn	Gly
	370					375					380				
Ser	Arg	Pro	Glu	Asn	Pro	Gly	Pro	Leu	Gly	Pro	Ile	Ser	Gly	Val	Gly
385					390					395					400
Gly	Gly	Gly	Leu	Gly	Ser	Gly	Ser	Asp	Asp	Asn	Ala	Leu	Lys	Gln	Glu

				405					410					415	
Leu	Pro	Arg	Ser	Val	His	Gly	Leu	Ser	Gly	Asn	Trp	Leu	Ala	Tyr	Trp
			420					425					430		
Gln	Tyr	Glu	Ile	Gly	Val	Ser	Gln	Gln	Asp	Ala	His	Phe	His	Phe	His
		435					440					445			
Gln	Ile	Arg	Leu	Gln	Ser	Phe	Pro	Gly	His	Ser	Gly	Ala	Val	Lys	Cys
	450					455					460				
Val	Ala	Pro	Leu	Ser	Ser	Glu	Asp	Phe	Phe	Leu	Ser	Gly	Ser	Lys	Asp
465					470					475					480
Arg	Thr	Val	Arg	Leu	Trp	Pro	Leu	Tyr	Asn	Tyr	Gly	Asp	Gly	Thr	Ser
				485					490					495	
Glu	Thr	Ala	Pro	Arg	Leu	Val	Tyr	Thr	Gln	His	Arg	Lys	Ser	Val	Phe
			500					505					510		
Phe	Val	Gly	Gln	Leu	Glu	Ala	Pro	Gln	His	Val	Val	Ser	Cys	Asp	Gly
		515					520					525			
Ala	Val	His	Val	Trp	Asp	Pro	Phe	Thr	Gly	Lys	Thr	Leu	Arg	Thr	Val
	530					535					540				
Glu	Pro	Leu	Asp	Ser	Arg	Val	Pro	Leu	Thr	Ala	Val	Ala	Val	Met	Pro
545					550					555					560
Ala	Pro	His	Thr	Ser	Ile	Thr	Met	Ala	Ser	Ser	Asp	Ser	Thr	Leu	Arg
				565					570					575	
Phe	Val	Asp	Cys	Arg	Lys	Pro	Gly	Leu	Gln	His	Glu	Phe	Arg	Leu	Gly
			580					585					590		
Gly	Gly	Leu	Asn	Pro	Gly	Leu	Val	Arg	Ala	Leu	Ala	Ile	Ser	Pro	Ser
		595					600					605			
Gly	Arg	Ser	Val	Val	Ala	Gly	Phe	Ser	Ser	Gly	Phe	Met	Val	Leu	Leu
	610					615					620				
Asp	Thr	Arg	Thr	Gly	Leu	Val	Leu	Arg	Gly	Trp	Pro	Ala	His	Glu	Gly
625					630					635					640

Asp Ile Leu Gln Ile Lys Ala Val Glu Gly Ser Val Leu Val Ser Ser 655 645 650 Ser Ser Asp His Ser Leu Thr Val Trp Lys Glu Leu Glu Gln Lys Pro 665 670 660 Thr His His Tyr Lys Ser Ala Ser Asp Pro Ile His Thr Phe Asp Leu 680 685 675 Tyr Gly Ser Glu Val Val Thr Gly Thr Val Ser Asn Lys Ile Gly Val 700 695 690 Cys Ser Leu Leu Glu Pro Pro Ser Gln Ala Thr Thr Lys Leu Ser Ser 715 720 705 710 Glu Asn Phe Arg Gly Thr Leu Thr Ser Leu Ala Leu Leu Pro Thr Lys 730 735 725 Arg His Leu Leu Gly Ser Asp Asn Gly Val Ile Arg Leu Leu Ala 740 745 750

<210> 3345

<211> 805

<212> PRT

<213> Homo sapiens

<400> 3345

Met Ala Arg Leu His Glu His Leu Lys Tyr Phe Val Asn Met Lys Ile
1 5 10 15

Ser Thr Asp Lys Ser Trp Gln Gly Val Thr Ile Tyr Phe Ser Gly His
20 25 30

Glu Thr Pro Gly Glu Gly Glu His Lys Ile Met Glu Phe Ile Arg Ser 35 40 45

Glu Lys Ala Lys Pro Asp His Asp Pro Asn Thr Arg His Cys Leu Tyr

	50					55					60				
Gly	Leu	Asp	Ala	Asp	Leu	Ile	Met	Leu	Gly	Leu	Thr	Ser	His	Glu	Ala
65					70					75					80
His	Phe	Ser	Leu	Leu	Arg	Glu	Glu	Val	Arg	Phe	Gly	Gly	Lys	Lys	Thr
				85					90					95	
Gln	Arg	Val	Cys	Ala	Pro	Glu	Glu	Thr	Thr	Phe	His	Leu	Leu	His	Leu
			100					105					110		
Ser	Leu	Met	Arg	Glu	Tyr	Ile	Asp	Tyr	Glu	Phe	Ser	Val	Leu	Lys	Glu
		115					120					125			
Lys	Ile	Thr	Phe	Lys	Tyr	Asp	Ile	Glu	Arg	Ile	Ile	Asp	Asp	Trp	Ile
	130					135					140				
Leu	Met	Gly	Phe	Leu	Val	Gly	Asn	Asp	Phe	Ile	Pro	His	Leu	Pro	His
145					150					155					160
Leu	His	Ile	Asn	His	Asp	Ala	Leu	Pro	Leu	Leu	Tyr	Gly	Thr	Tyr	Val
				165					170					175	
Thr	Ile	Leu	Pro	Glu	Leu	Gly	Gly	Tyr	Ile	Asn	Glu	Ser	Gly	His	Leu
			180					185					190		
Asn	Leu	Pro	Arg	Phe	Glu	Lys	Tyr	Leu	Val	Lys	Leu	Ser	Asp	Phe	Asp
		195					200					205			
Arg	Glu	His	Phe	Ser	Glu	Val	Phe	Val	Asp	Leu	Lys	Trp	Phe	Glu	Ser
	210					215					220				
Lys	Val	Gly	Asn	Lys	Tyr	Leu	Asn	Glu	Ala	Ala	Gly	Val	Ala	Ala	Glu
225					230					235					240
Glu	Ala	Arg	Asn	Tyr	Lys	Glu	Lys	Lys	Lys	Leu	Lys	Gly	Gln	Glu	Asn
				245					250					255	
Ser	Leu	Cys	Trp	Thr	Ala	Leu	Asp	Lys	Asn	Glu	Gly	Glu	Met	Ile	Thr
			260					265					270		
Ser	Lys	Asp	Asn	Leu	Glu	Asp	Glu	Thr	Glu	Asp	Asp	Asp	Leu	Phe	Glu
		275					280					285			

Ihr	Glu	Phe	Arg	GIn	lyr	Lys	Arg	Ihr	lyr	lyr	Met	Ihr	Lys	Met	Gly
	290					295					300				
Val	Asp	Val	Val	Ser	Asp	Asp	Phe	Leu	Ala	Asp	Gln	Ala	Ala	Cys	Tyr
305					310					315					320
Val	Gln	Ala	Ile	Gln	Trp	Ile	Leu	His	Tyr	Tyr	Tyr	His	Gly	Val	Glr
				325					330					335	
Ser	Trp	Ser	Trp	Tyr	Tyr	Pro	Tyr	His	Tyr	Ala	Pro	Phe	Leu	Ser	Asp
			340					345					350		
Ile	His	Asn	Ile	Ser	Thr	Leu	Lys	Ile	His	Phe	Glu	Leu	Gly	Lys	Pro
		355					360					365			
Phe	Lys	Pro	Phe	Glu	Gln	Leu	Leu	Ala	Val	Leu	Pro	Ala	Ala	Ser	Lys
	370					375					380				
Asn	Leu	Leu	Pro	Ala	Cys	Tyr	Gln	His	Leu	Met	Thr	Asn	Glu	Asp	Ser
385					390					395					400
Pro	Ile	Ile	Glu	Tyr	Tyr	Pro	Pro	Asp	Phe	Lys	Thr	Asp	Leu	Asn	Gly
				405					410					415	
Lys	Gln	Gln	Glu	Trp	Glu	Ala	Val	Val	Leu	Ile	Pro	Phe	Ile	Asp	Glu
			420					425					430		
Lys	Arg	Leu	Leu	Glu	Ala	Met	Glu	Thr	Cys	Asn	His	Ser	Leu	Lys	Lys
		435					440					445			
Glu	Glu	Arg	Lys	Arg	Asn	Gln	His	Ser	Glu	Cys	Leu	Met	Cys	Trp	Tyr
	450					455					460				
Asp	Arg	Asp	Thr	Glu	Phe	Ile	Tyr	Pro	Ser	Pro	Trp	Pro	Glu	Lys	Phe
465					470					475					480
Pro	Ala	Ile	Glu	Arg	Cys	Cys	Thr	Arg	Tyr	Lys	Ile	Ile	Ser	Leu	Asp
				485					490					495	
Ala	Trp	Arg	Val	Asp	Ile	Asn	Lys	Asn	Lys	Ile	Thr	Arg	Ile	Asp	Gln
			500					505					510		
Lys	Ala	Leu	Tyr	Phe	Cys	Gly	Phe	Pro	Thr	Leu	Lys	His	Ile	Arg	His

		515					520					525			
Lys	Phe	Phe	Leu	Lys	Lys	Ser	Gly	Val	Gln	Val	Phe	Gln	Gln	Ser	Ser
	530					535					540				
Arg	Gly	Glu	Asn	Met	Met	Leu	Glu	Ile	Leu	Val	Asp	Ala	Glu	Ser	Asp
545					550					555					560
Glu	Leu	Thr	Val	Glu	Asn	Val	Ala	Ser	Ser	Val	Leu	Gly	Lys	Ser	Val
				565					570					575	
Phe	Val	Asn	Trp	Pro	His	Leu	Glu	Glu	Ala	Arg	Val	Val	Ala	Val	Ser
			580					585					590		
Asp	Gly	Glu	Thr	Lys	Phe	Tyr	Leu	Glu	Glu	Pro	Pro	Gly	Thr	Glņ	Lys
		595					600					605			
Leu	Tyr	Ser	Gly	Arg	Thr	Ala	Pro	Pro	Ser	Lys	Val	Val	His	Leu	Gly
	610					615					620				
Asp	Lys	Glu	Gln	Ser	Asn	Trp	Ala	Lys	Glu	Val	Gln	Gly	Ile	Ser	Glu
625					630					635					640
His	Tyr	Leu	Arg	Arg	Lys	Gly	Ile	Ile	Ile	Asn	Glu	Thr	Ser	Ala	Val
				645					650					655	
Val	Tyr	Ala	Gln	Leu	Leu	Thr	Gly	Arg	Lys	Tyr	Gln	Ile	Asn	Gln	Asn
			660					665					670		
Gly	Glu	Val	Arg	Leu	Glu	Lys	Gln	Trp	Ser	Lys	Gln	Val	Val	Pro	Phe
		675					680					685			
Val	Tyr	Gln	Thr	Ile	Val	Lys	Asp	Ile	Arg	Ala	Phe	Asp	Ser	Arg	Phe
	690					695					700				
Ser	Asn	Ile	Lys	Thr	Leu	Asp	Asp	Leu	Phe	Pro	Leu	Arg	Ser	Met	Val
705					710					715					720
Phe	Met	Leu	Gly	Thr	Pro	Tyr	Tyr	Gly	Cys	Thr	Gly	Glu	Val	Gln	Asp
				725					730					735	
Ser	Gly	Asp	Val	Ile	Thr	Glu	Gly	Arg	Ile	Arg	Val	Ile	Phe	Ser	Ile
			740					745					750		

Pro Cys Glu Pro Asn Leu Asp Ala Leu Ile Gln Asn Gln His Lys Tyr Ser Ile Lys Tyr Asn Pro Gly Tyr Val Leu Ala Ser Arg Leu Gly Val Ser Gly Tyr Leu Val Ser Arg Phe Thr Gly Ser Ile Phe Ile Gly Arg Gly Ser Arg Arg Lys <210> 3346 <211> 108 <212> PRT <213> Homo sapiens <400> 3346 Met Tyr Val Val Phe Tyr Ala Asp Arg Ile Ile Gln Lys Asn Ala Leu Lys Ser Phe Ala Leu Val Ala Gln Ala Gly Val Gln Trp Cys Asp Pro Gly Ser Leu Gln Pro Leu Pro Pro Gly Leu Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser Ser Trp Asp Tyr Arg Arg Ile Pro Trp Glu His Pro Pro Ala Glu Ile Cys Thr Ser Ala Thr Ile Leu Ser Gly Arg Arg Lys Gly Lys Gly Ser Ala Ala Ser Leu Ala Thr Ala Cys Ile Ile Ser Ser

Gln Arg Arg Ser Thr Gly Ser Gly Ser Phe Arg Ala

100 105

<210> 3347

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3347

Met Pro Val Ile Pro Ala Thr Arg Glu Ala Glu Ala Arg Glu Ser Leu

1 5 10 15

Asp Ser Lys His Ser Phe Ile His Ile Pro Ile His Pro Tyr Thr Tyr

20 25 30

Ser Ser Asn Ser Cys Ser Ser Lys His Pro Ser Ile His Pro Ser Ile

35 40 45

His Pro Ser Ile His Pro Ser Ile Tyr Thr Ser Ile Tyr Pro Phe Met

50 55 60

His Leu Tyr Ile Tyr Leu Leu Ile Lys Phe Leu Ser Ile His Pro Ser

65 70 75 80

Thr Tyr Leu Ser Asn Phe Cys Ser Ser Lys His Pro Pro Ile His Leu

85 90 95

Ser Thr His Pro Ser Ile His Ala Cys Met His Pro Ser Ile His Thr

100 105 110

Tyr Ile His Ser Leu Ile Arg Leu Tyr Thr His Pro Ser Met Tyr Leu

115 120 125

Phe Ile

<210> 3348

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3348

Met Ser Lys Leu Ala Val Leu Thr Arg Thr Leu Glu Gly Met Ala Met

1 5 10 15

Glu His Arg Leu Glu Met Val Arg Phe Ile Phe Thr Ser Pro Ala Pro

20 25 30

Leu Asp Lys Val Leu Gly Met Val Arg Ala Tyr Lys Glu Thr Gln Thr

35 40 45

Ala Ile Asn Ile Ser Leu Tyr Asp Ala Met Pro Trp Arg Pro Asn Pro

50 55 60

Pro Leu Leu Phe Phe Phe Phe Leu Thr Gly Ser His Phe Val Thr

65 70 75 80

Gln Ala Gly Val Glu Trp Gly Asp Leu Gly Ser Leu Gln Pro Pro Gln

85 90 95

Pro Pro Gly Leu Lys Pro Ser Ser Cys Leu Ser Pro Pro Ser Ser Trp

100 105 110

Asp Tyr Arg His Ala Pro Ser Cys Leu Ala Ser Phe Phe Phe Phe

115 120 125

Glu Thr Glu Ser Cys Ser Leu Pro Gln Ala Arg Val Gln Trp His Asp

130 135 140

Leu Gly Ser Leu Gln Ala Pro Pro Pro

145 150

<210> 3349

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3349

Met Glu Ile Asp Gly Phe Gln Gln Leu Asp Leu Glu Lys Ser Val Pro

1 5 10 15

Ser Lys Lys Thr Thr Pro Lys Arg Ile Ile His Phe Val Asp Gly Asp

20 25 30

Ile Met Glu Glu Tyr Ser Thr Glu Glu Glu Glu Glu Glu Glu Lys Glu

35 40 45

Glu Gln Ser Thr Asn Ser Thr Leu Asp Pro Ser Lys Leu Ser Trp Gly

50 55 60

Pro Tyr Leu Arg Phe Trp Ala Gly Arg Ile Ala Ser Thr Ser Phe Ser

65 70 75 80

Met Leu Ser Leu Gln Ala Thr Leu Leu Leu Lys Ala Glu Lys Glu Gly

85 90 95

Leu Lys Gln Leu Leu Arg Ser Leu Ser Gly Cys Met Glu Glu Phe Leu

100 105 110

Met Trp Val Leu Val Thr Leu Asp

115 120

<210> 3350

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3350

Met Glu Thr Leu Val Val Trp Lys Ile Gln Glu Thr Ser Ile Leu Thr 10 15 1 5 Ile Ile Lys Ile His Met Gly Cys Ala Gln Trp Leu Ser Pro Val Ile 20 25 30 Pro Ala Phe Trp Glu Ala Gly Val Gly Gly Leu Leu Glu Ala Arg Tyr 35 40 45 Ser Arg Pro Ala Trp Gln Pro Gly Glu Ile Pro Cys Ile Gln Lys Ile 50 55 60 Glu Lys Leu Ala Arg Asp Asp Gly Val Arg Leu Trp Ser Gln Leu Leu 70 75 80 65 Gly Arg Leu Arg Trp Glu Asp Cys Leu Ser Leu Gly Gly Arg Gly Cys 90 95 85 Ser Glu Trp Arg Leu Arg His Trp Thr Pro Ala Trp Ala Thr Val Arg 100 105 110 Pro Cys Leu Lys Lys Leu Ile Met 115 120 <210> 3351

<211> 862

<212> PRT

<213> Homo sapiens

<400> 3351

Met Trp Gln Leu Leu Pro Val Glu Gln Asp Thr Ser Asn Val Thr Glu

1 5 10 15

Met Lys Val Ser Glu Lys Ser His Asn Ala Phe Lys Ala Thr Asn Lys
20 25 30

Lys Arg Glu Thr Asp Val His Leu Lys Ser Gln Asp Phe Leu Met Lys

		35					40					45			
Thr	Asn	Thr	Ser	Thr	Gly	Leu	Lys	Met	Ala	Met	Glu	Arg	Ser	Leu	Asn
	50					55					60				
Pro	Ile	Asn	Phe	Asn	Pro	Glu	Asn	Asn	Val	Lys	Glu	Ser	Glu	Cys	Pro
65					70					75					80
Leu	Pro	Pro	Pro	Ser	Pro	Pro	Pro	Pro	Pro	Pro	Ser	Asn	Ala	Ser	Ser
				85					90					95	
Glu	Ile	Glu	Phe	Pro	Leu	Pro	Pro	Pro	Pro	Pro	Leu	Met	Met	Phe	Pro
			100					105					110		
Glu	Lys	Asn	Gly	Phe	Leu	Pro	Ser	Leu	Ser	Thr	Glu	Lys	Ile	Lys	Ala
		115					120					125			
Glu	Phe	Glu	Ser	Phe	Pro	Gly	Leu	Pro	Leu	Pro	Pro	Pro	Pro	Val	Asp
	130					135					140				
Glu	Lys	Ser	Glu	Arg	Glu	Ser	Ser	Ser	Met	Phe	Leu	Pro	Pro	Pro	Pro
145					150					155					160
Pro	Pro	Thr	Pro	Ser	Gln	Lys	Pro	Ala	His	Leu	Leu	Ser	Ser	Ser	Ala
				165					170					175	
Pro	Glu	Lys	His	Ser	Gly	Asp	Phe	Met	Gln	Gln	Tyr	Ser	Gln	Lys	Glu
			180					185					190		
Ala	Ser	Asn	Ser	Gln	Asn	Ser	Gln	Ala	Lys	Ile	Ile	Thr	Gly	Lys	Thr
		195					200					205			
Gly	Val	Leu	Pro	Pro	Pro	Thr	Leu	Pro	Lys	Pro	Lys	Leu	Pro	Lys	His
	210					215					220				
Ile	Lys	Asp	Asn	Lys	Asn	Asp	Phe	Ser	Pro	Lys	Val	Glu	Leu	Ala	Thr
225					230					235					240
Ser	Leu	Ser	Asp	Met	Glu	Cys	Lys	Ile	Thr	Thr	Ser	Lys	Asp	Gln	Lys
	٠			245					250					255	
Lys	Val	Met	Val	Met	Thr	Ser	Ser	Glu	His	Thr	Glu	Thr	Lys	Gln	Asn
			260					265					270		

Val	Ile	Ser	Lys	Ser	Leu	Asp	Glu	Arg	Lys	Gln	Leu	Ser	Ile	Asp	Ser
		275					280					285			
Ala	Asn	Cys	Leu	Ser	His	Thr	Val	Pro	Gly	Thr	Ser	Ala	Pro	Arg	Lys
	290					295					300				
Lys	Gln	Ile	Ala	Pro	Leu	Ile	Lys	Ser	His	Ser	Phe	Pro	Glu	Ser	Ser
305					310					315					320
Gly	Gln	Gln	Asn	Pro	Lys	Pro	Tyr	Met	Arg	Lys	Phe	Lys	Thr	Pro	Leu
				325					330					335	
Met	Ile	Ala	Glu	Glu	Lys	Tyr	Arg	Gln	Gln	Lys	Glu	Glu	Ile	Glu	Lys
			340					345					350		
Gln	Lys	Gln	Glu	Ser	Ser	Tyr	Tyr	Asn	Ile	Val	Lys	Thr	Gln	Ser	Gln
		355					360					365			
Asn	Gln	His	Ile	Thr	Glu	Val	Glu	Lys	Glu	Met	Pro	Leu	Gln	Lys	Thr
	370					375					380				
Asn	Glu	Glu	Val	Ser	Leu	Ser	Gly	Ile	Asp	Ser	Glu	Cys	Thr	Val	Val
385					390					395					400
Gln	Pro	Ser	Pro	Gly	Ser	Gln	Ser	Asn	Ala	Arg	Ile	Leu	Gly	Val	Cys
				405					410					415	
Ser	Asp	Asn	Gln	Leu	Ser	Thr	Thr	Ser	Pro	Glu	Thr	Val	Ala	Ala	Lys
			420					425					430		
Arg	Leu	His	His	Val	Leu	Ala	Ala	Ser	Glu	Asp	Lys	Asp	Lys	Met	Lys
		435					440					445			
Lys	Glu	Val	Leu	Gln	Ser	Ser	Arg	Asp	Ile	Met	Gln	Ser	Lys	Ser	Ala
	450					455					460				
Cys	Glu	Ile	Lys	Gln	Ser	His	Gln	Glu	Cys	Ser	Thr	Gln	Gln	Thr	Gln
465					470					475					480
Gln	Lys	Lys	Tyr	Leu	Glu	Gln	Leu	His	Leu	Pro	Gln	Ser	Lys	Pro	Ile
				485					490					495	
Ser	Pro	Asn	Phe	Lys	Val	Lvs	Thr	Ile	Lys	Leu	Pro	Thr	Leu	Asp	His

			500					505					510		
Thr	Leu	Asn	Glu	Thr	Asp	His	Ser	Tyr	Glu	Ser	His	Lys	Gln	Gln	Ser
		515					520					525			
Glu	Ile	Asp	Val	Gln	Thr	Phe	Thr	Lys	Lys	Gln	Tyr	Leu	Lys	Thr	Lys
	530					535					540				
Lys	Thr	Glu	Ala	Ser	Thr	Glu	Cys	Ser	His	Lys	Gln	Ser	Leu	Ala	Glu
545					550					555					560
Arg	His	Tyr	Gln	Leu	Pro	Lys	Lys	Glu	Lys	Arg	Val	Thr	Val	Gln	Leu
				565					570					575	
Pro	Thr	Glu	Ser	Ile	Gln	Lys	Asn	Gln	Glu	Asp	Lys	Leu	Lys	Met	Val
			580					585					590		
Pro	Arg	Lys	Gln	Arg	Glu	Phe	Ser	Gly	Ser	Asp	Arg	Gly	Lys	Leu	Pro
		595					600					605			
Gly	Ser	Glu	Glu	Lys	Asn	Gln	Gly	Pro	Ser	Met	Ile	Gly	Arg	Lys	Glu
	610					615					620				
Glu	Arg	Leu	Ile	Thr	Glu	Arg	Lys	His	Glu	His	Leu	Lys	Asn	Lys	Ser
625					630					635					640
Ala	Pro	Lys	Val	Val	Lys	Gln	Lys	Val	Ile	Asp	Ala	His	Leu	Asp	Ser
				645					650					655	
Gln	Thr	Gln	Asn	Phe	Gln	Gln	Thr	Gln	Ile	Gln	Thr	Ala	Glu	Ser	Lys
			660					665					670		
Ala	Glu	His	Lys	Lys	Leu	Pro	Gln	Pro	Tyr	Asn	Ser	Leu	Gln	Glu	Glu
		675					680					685		•	
Lys	Cys	Leu	Glu	Val	Lys	Gly	Ile	Gln	Glu	Lys	Gln	Val	Phe	Ser	Asn
	690					695					700				
Thr	Lys	Asp	Ser	Lys	Gln	Glu	Ile	Thr	Gln	Asn	Lys	Ser	Phe	Phe	Ser
705					710					715					720
Ser	Val	Lys	Glu	Ser	Gln	Arg	Asp	Asp	Gly	Lys	Gly	Ala	Leu	Asn	Ile
				725					730					735	

Val Glu Phe Leu Arg Lys Arg Glu Glu Leu Gln Gln Ile Leu Ser Arg 745 740 750 Val Lys Gln Phe Glu Ala Glu Pro Asn Lys Ser Gly Leu Lys Thr Phe 760 755 765 Gln Thr Leu Leu Asn Thr Ile Pro Gly Trp Leu Ile Ser Glu Asp Lys 770 775 780 Arg Glu Tyr Ala Val His Ile Ala Met Glu Asn Asn Leu Glu Lys Val 790 795 800 785 Lys Glu Glu Ile Thr His Ile Lys Thr Gln Ala Glu Asp Met Leu Val 805 810 815 Ser Tyr Glu Asn Ile Ile Gln Thr Ala Met Met Ser Ser Lys Thr Gly 820 825 830 Lys Pro Gly Asn Lys Pro Thr Ser Leu Asp Glu Thr Ser Ser Lys Val 835 840 845 Ser Asn Val His Val Ser Asn Asn Lys Asn Ser Glu Gln Lys 850 855 860

<210> 3352

<211> 198

<212> PRT

<213> Homo sapiens

<400> 3352

Met Asn Phe Val Leu Val Lys Val Arg Tyr Asp Val Val Gly Met Phe

1 5 10 15

Trp Asn Met Phe Gln Val Ala Ser Gly Gly Gly Val Gly Asp
20 25 30

Gly Val Gln Glu Pro Thr Thr Gly Asn Trp Arg Gly Met Leu Lys Thr

Ser Lys Ala Glu Glu Leu Leu Ala Glu Glu Lys Ser Lys Pro Ile Pro Ile Met Pro Ala Ser Pro Gln Lys Lys Lys Ile Lys Gln His Pro Asp Arg Tyr Thr Tyr Ser Phe Arg Leu Thr Asp Leu Ser Cys Ile Tyr Gly Val Val Met Arg Phe Arg Thr Tyr Thr Tyr Phe Val Lys Ile Pro Gln Met Ile Leu Gly Met Asn Asp Tyr Ile Ile Asn Phe Lys Met Tyr Leu Glu Ile Leu Lys Thr Ser Ser Pro Val Ser Asn Arg Gln His Ile Tyr Ile Ala Asp Ile Thr Phe Phe Ser Val Tyr Asp Gln Val Phe Met Lys Asp Tyr Trp Gln Gly Lys Tyr Glu Tyr Val Asn Phe Ser Leu Trp His Gln Phe Thr Lys Glu Gln Gln Ala His Gln Leu Met Ser Asn Ile Lys Thr Pro Thr Ser Val

<210> 3353

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3353

Met Cys Met Ile Asn Val Pro Leu Glu Gln Asp Asp Trp Asn Pro Gln Val Pro Ser Pro Thr Gln Leu Cys Pro Leu Ser Leu Pro Trp Pro Thr Gln Leu Leu Gln Gln Thr Pro Val Gly Leu His Trp Ser Arg Gln Gln Glu Gly Pro Gln Ala Leu Ser Tyr Trp Glu Ser Gly Asp Gly Thr Gly Thr Arg Leu Leu Arg Lys Glu Gly Ser Trp Pro Val Gln Asn Val Ala Asp Gly Pro Ala Trp Trp Leu Met Pro Val Val Leu Ala Leu Gly Glu Ala Glu Ala Asp Arg Ser Pro Glu Val Gly Ser Pro Thr Pro Ala Trp Pro Ala <210> 3354 <211> 105 <212> PRT <213> Homo sapiens <400> 3354 Met Gly Phe Val Asn Ser Arg Lys Gly Thr Lys Phe Cys Leu Lys Arg

Glu Gly Phe Ser Lys Gly Val Met Phe Asp Leu Arg Pro Arg Glu Gly

Glu Arg Lys Glu Ala Cys Arg Gly Ala Leu Val Thr Arg Gly Met Leu

45 35 40 Tyr Cys Val Asp Ser Arg Asn Arg Gly Glu Ala Leu Ala Leu Ser Leu 50 55 60 Ser Ala Phe Trp Phe Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr 65 70 75 80 Leu Cys Phe Cys Leu Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe 90 85 95 Lys Phe Arg Glu Pro Cys Leu Trp His 100 105

<210> 3355

<211> 250

<212> PRT

<213> Homo sapiens

<400> 3355

Met Pro Leu Asp Lys Met Val Asp Leu Ser Gly Ser Gln Leu Arg Arg

1 5 10 15

Phe Pro Leu His Val Cys Ser Phe Arg Glu Leu Val Lys Leu Tyr Leu 20 25 30

Ser Asp Asn His Leu Asn Ser Leu Pro Pro Glu Leu Gly Gln Leu Gln
35 40 45

Asn Leu Gln Ile Leu Ala Leu Asp Phe Asn Asn Phe Lys Ala Leu Pro
50 55 60

Gln Val Val Cys Thr Leu Lys Gln Leu Cys Ile Leu Tyr Leu Gly Asn 65 70 75 80

Asn Lys Leu Cys Asp Leu Pro Ser Glu Leu Ser Leu Leu Gln Asn Leu

85 90 95

Arg Thr Leu Trp Ile Glu Ala Asn Cys Leu Thr Gln Leu Pro Asp Val Val Cys Glu Leu Ser Leu Leu Lys Thr Leu His Ala Gly Ser Asn Ala Leu Arg Leu Leu Pro Gly Gln Leu Arg Arg Leu Gln Glu Leu Arg Thr Ile Trp Leu Ser Gly Asn Arg Leu Thr Asp Phe Pro Thr Val Leu Leu His Met Pro Phe Leu Glu Val Ile Asp Val Asp Trp Asn Ser Ile Arg Tyr Phe Pro Ser Leu Ala His Leu Ser Ser Leu Lys Leu Val Ile Tyr Asp His Asn Pro Cys Arg Asn Ala Pro Lys Val Ala Lys Gly Val Arg Arg Val Gly Arg Trp Ala Glu Glu Thr Pro Glu Pro Asp Pro Arg Lys Ala Arg Arg Tyr Ala Leu Val Arg Glu Glu Ser Gln Glu Leu Gln Ala Pro Val Pro Leu Leu Pro Pro Thr Asn Ser

<210> 3356

<211> 106

<212> PRT

<213> Homo sapiens

<400> 3356

Met Thr Ser Val Ala His Met Ser Thr Phe Arg Pro His Ile Cys His

Leu Ser Lys Thr Ser Pro His Pro Leu Val Thr Arg Lys Arg Ala Ser Ser Pro His Val Val Ile Val Leu Thr Ser Gly Leu Lys Gly Lys Ala Ser Leu Arg Leu Arg Pro His Leu Pro Val Ile Phe His Pro Ile Pro Leu Pro Arg Leu Leu Gly Leu Ser Ser Cys Ser Ile Pro Pro Phe Ala Val Ser Val Pro Pro Phe Pro Pro Gly Ser Ser Ser Ser Ala Met Cys Ser Leu Pro Phe Leu Leu Lys Arg Lys Thr

<210> 3357

<211> 214

<212> PRT

<213> Homo sapiens

<400> 3357

Met Asn Asn Glu Thr Thr Leu Ile Ser Leu Lys Glu Ala Met Lys

Arg Val Asp His Lys Leu Gln Ala Leu Glu Thr Gln Phe Lys Glu Leu

Asp Phe Thr Lys Asp Asn Leu Met Gln Lys Phe Glu His His Ser Lys

Ala Leu Ala Ser Gln Ala Ala Gln Asp Glu Met Trp Thr Ala Val Arg

Ala Leu Gln Leu Thr Ser Met Glu Leu Asn Ile Leu Tyr Ser Tyr Val 80 70 75 65 Ile Glu Val Leu Ile Cys Leu His Thr Arg Val Leu Glu Lys Leu Pro 90 85 95 Asp Leu Val Arg Gly Leu Pro Thr Leu Ala Ser Val Leu Arg Arg Lys 100 105 110 Val Lys Asn Lys Arg Val Arg Val Val Trp Glu Ser Ile Leu Glu Glu 120 125 115 Cys Gly Leu Gln Glu Gly Asp Ile Thr Ala Leu Cys Thr Phe Phe Ile 130 135 140 Ala Arg Gly Asn Lys Ala Glu His Tyr Thr Ala Lys Val Arg Gln Met 145. 150 155 160 Tyr Ile Arg Asp Val Thr Phe Leu Ile Thr Asn Met Val Lys Asn Gln 170 175 165 Ala Leu Gln Asp Ser Leu Leu Arg Ala Val Gln Val Ile Glu Lys Gly 180 185 190 Lys Ala Val Arg Thr Pro Glu Lys Gln Lys Ser Ser Leu Glu Glu Leu 195 200 205 Ile Pro Ser Val Lys Asn 210

<210> 3358

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3358

Met Gln Met Gly Asp Glu Phe Leu His Thr Leu Val Phe Leu Pro Phe

Val Asn Leu Thr Thr Asn Val Leu Ser Tyr Arg Lys Met Cys Val Arg Val Cys Met Ser Glu Cys Val Arg Val Cys Val Cys Ala Cys Cys Lys Asn Met Leu Glu Cys Glu Cys Gly Val Cys Leu His Val Cys Met Cys Glu Cys Met His Ala Arg Val Cys Lys Ser Val His Val His Val Cys Glu Thr Thr Gly Met Arg Tyr Val Arg Met Ser Val Cys Thr Cys Val Ser Met Cys Ile Val Tyr Asn Val His Glu Tyr Ser Val Arg Ala

<210> 3359

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3359

Met Gly Lys Arg Asp Asn Arg Val Ala Tyr Met Asn Pro Ile Ala Met

Ala Arg Ser Arg Gly Pro Ile Gln Ser Ser Gly Pro Thr Ile Gln Asp

Tyr Leu Asn Arg Pro Arg Pro Thr Trp Glu Glu Val Lys Glu Gln Leu

Glu Lys Lys Lys Gly Ser Lys Ala Leu Ala Glu Phe Glu Glu Lys

Met Asn Glu Asn Trp Lys Lys Glu Leu Glu Lys His Arg Glu Lys Leu
65 70 75 80

Leu Ser Gly Ser Glu Ser Ser Ser Lys Lys Arg Gln Arg Lys Lys Lys
85 90 95

Glu Lys Lys Lys Ser Gly Arg Val Ser Lys Asn Phe Pro Phe Phe
100 105 110

<210> 3360

<211> 290

<212> PRT

<213> Homo sapiens

<400> 3360

Met Glu Ala Leu Ala Ser Thr Glu Lys Met Leu Gln Asp Lys Val Asn
1 5 10 15

Lys Thr Ser Lys Glu Arg Gln Gln Gln Val Glu Ala Val Glu Leu Glu 20 25 30

Ala Lys Glu Val Leu Lys Lys Leu Phe Pro Lys Val Ser Val Pro Ser

35 40 45

Asn Leu Ser Tyr Gly Glu Trp Leu His Gly Phe Glu Lys Lys Ala Lys
50 55 60

Glu Cys Met Ala Gly Thr Ser Gly Ser Glu Glu Val Lys Val Leu Glu
65 70 75 80

His Lys Leu Lys Glu Ala Asp Glu Met His Thr Leu Leu Gln Leu Glu
85 90 95

Cys Glu Lys Tyr Lys Ser Val Leu Ala Glu Thr Glu Gly Ile Leu Gln
100 105 110

Lys Leu Gln Arg Ser Val Glu Glu Glu Glu Asn Lys Trp Lys Val Lys

		115					120					125			
Val	Asp	Glu	Ser	His	Lys	Thr	Ile	Lys	Gln	Met	Gln	Ser	Ser	Phe	Thr
	130					135					140				
Ser	Ser	Glu	Gln	Glu	Leu	Glu	Arg	Leu	Arg	Ser	Glu	Asn	Lys	Asp	Ile
145					150					155					160
Glu	Asn	Leu	Arg	Arg	Glu	Arg	Glu	His	Leu	Glu	Met	Glu	Leu	Gly	Lys
				165					170					175	
Ala	Glu	Met	Glu	Arg	Ser	Thr	Tyr	Val	Thr	Glu	Val	Arg	Glu	Leu	Lys
			180					185					190		
Ala	Gln	Leu	Asn	Glu	Thr	Leu	Thr	Lys	Leu	Arg	Thr	Glu	Gln	Asn	Glu
		195					200					205			
Arg	Gln	Lys	Val	Ala	Gly	Asp	Leu	His	Lys	Ala	Gln	Gln	Ser	Leu	Glu
	210					215					220				
Leu	Ile	Gln	Ser	Lys	Ile	Val	Lys	Ala	Ala	Gly	Asp	Thr	Thr	Val	Ile
225					230					235					240
Glu	Asn	Ser	Asp	Val	Ser	Pro	Glu	Thr	Glu	Ser	Ser	Glu	Lys	Glu	Thr
				245					250					255	
Met	Ser	Val	Ser	Leu	Asn	Gln	Thr	Val	Thr	Gln	Leu	Gln	Gln	Leu	Leu
			260					265					270		
Gln	Ala	Val	Asn	Gln	Gln	Leu	Thr	Lys	Glu	Lys	Glu	His	Tyr	Gln	Val
		275					280					285			
Leu	Glu														

<210> 3361

290

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3361

Met Ala Ala Ala Arg Thr Pro Pro Gly Gln Gln Pro Arg Leu Thr Ser

1 5 10 15

Pro Pro Pro Pro Ser Ile Ser Pro Ala Ala Trp Arg Trp Glu Ala Ala

20 25 30

Pro Arg Gly His Gly Pro Ser Pro Lys Ala His Thr Pro Ala Phe Arg

35 40 45

Arg His Pro Pro Leu Thr Thr Ala Arg Glu Val Ala Arg Val Arg Thr

50 55 60

Leu His Pro Gln Asp Val Ala Leu Ala Gly Pro Pro Gly Ser Gly Cys

65 70 75 80

Leu Arg Trp Val Trp Asp Leu Ser Cys Gly Val Phe Asp Gly Gly Trp

85 90 95

Leu Gly Arg Glu Ala Ser Ser Val Gly Arg Gly Pro Arg Gly Pro Gly

100 105 110

Ala Ala Val Val Lys Met Arg Arg His Gly Gly Arg Gly Lys Ala Pro

115 120 125

Leu Pro Ser Ser Thr Pro Ala Pro Gly Asp Cys Phe Leu Tyr

130 135 140

<210> 3362

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3362

Met Leu Arg Gln Cys Tyr Lys Glu Asp Gly Ser Ser Lys Ser Pro Asp

Cys Pro Val Cys Ser Arg Ser Leu Asn Lys Leu Ala Gln Pro Leu Pro Met Ala His Cys Ala Asn Ser Arg Leu Val Cys Lys Ile Ser Gly Asp Val Met Asn Glu Asn Asn Pro Pro Met Met Leu Pro Asn Gly Tyr Val Tyr Gly Tyr Asn Val Arg Gly Ala Gly Gln Gly Gln Ala Gly Thr His Arg His Arg Asp Arg Ala Val Trp Asp Gly Gln Gly Arg Gly Ala Arg Leu Ala Arg Ile Ala Ile Gly Thr Gly Leu Cys Gly Thr Gly Arg Ala Gly Gly Gln Ala Gly Thr Arg Arg His Arg Asp Arg Ala Val Trp Gly Gly Gln Gly Ser Gly Ala Arg Leu Ala His Val Ala Ile Gly Thr Gly Leu Ser Ser Arg Pro Thr Leu Pro

<210> 3363

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3363

Met Ser Met Lys Leu Ser Val Thr Cys Glu Ser Ala Val Pro Met Ser

1 5 10 15

Ile Tyr Val Leu	Asn Leu I	Leu Leu Phe	Gln Lys	Arg Gly	Leu Ala His
20		25			30
Gln Leu Glu Glu	Tyr Leu I	Leu Lys Trp	Arg Arg	Asn Lys	Ala Thr Lys
35		40		45	
Val Ala Lys Ile	Ser Ser (Glu Gln Lys	Lys Ile	Leu Arg	Arg Lys Met
50		55		60	
Val Leu Gln Leu	Val Leu (Gln Gly Leu	Ala Thr	Cys Val	Ser His Ser
65	70		75		80
Arg Ala Ala Asn	His Gly '	Val Gly Pro	Ser His	Phe Ala	Gln Gly Gly
	85		90		95
Leu Arg Ser Ser	Gly Lys	Val Leu Leu	Gln Val	Thr Asp	Tyr Arg Cys
100		105			110
Val Val Glu Gly	Gln Ala				
115					
<210> 3364					
<211> 142					
<212> PRT					
<213> Homo sapie	ens				
<400> 3364					
Met Trp Ser Leu	Pro His	Pro Thr Trp	Thr Leu	Asp Ser	Thr Cys Tyr
1	5		10		15
Ala Ala Ala Pro	Ala Trp	Ala Ser Phe	Ser Pro	Arg Thr	Asp Ser Asp
20		25			30

Ile Pro His Cys Ser Thr Thr Leu His Gly His Pro Pro His Pro Ala

Trp Ala Leu Thr Pro Tyr Ser Arg Pro Pro Pro Ala Met Ser Gly His

40

35

50 55 60

Pro Pro Hio Pro Sor Trp Ala Cyc Lyc Lou His Lle

Pro Pro His Pro Ser Trp Ala Cys Lys Leu His Ile Thr Cys Pro His
65 70 75 80

Ala Trp Ile Pro Phe Ser Pro His Met Ala Ser Asp Thr Pro Pro Trp

85 90 95

Thr Ala Ile Leu Gln Gly Ser Thr Ser Ser Pro Ala Gln Ala Cys Trp
100 105 110

Pro Pro Ala Trp Met Leu Phe Phe Thr Gly Pro Ala Leu Thr Pro Pro 115 120 125

Gly Ala Ser Cys Ala Gly Val Phe Leu Thr Leu Leu Gly Leu 130 135 140

<210> 3365

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3365

Met Asp Pro Val Ala Ser Ser Ser Ile Arg Pro Glu Pro Asp Ser His

1 5 10 15

Tyr Leu Gln Phe Gln Thr Gln Pro His Val Leu Trp Asn Arg Leu Pro
20 25 30

Glu Ala Trp Asp Arg Ser Glu Ser Leu Asp Ser Ser Trp Gly Gly Trp

35 40 45

Val Gly Val Arg Gly Arg Val Pro Glu Gly Pro His Ser Thr Leu Ser 50 55 60

Trp Ser Ala Gly Gln Gln Glu Glu Gln Ala Trp Gly Trp Leu Trp Ser
65 70 75 80

Leu Pro Pro Arg Ser Glu Ala Val Arg Gln Glu Lys Gly Glu Lys Glu Pro Ser Phe Leu Glu Ser Asp Ser Asp Pro Ser Arg His Ser Gln Leu Val Ser Gly Asp Leu Ser Leu Thr His <210> 3366 <211> 100 <212> PRT <213> Homo sapiens <400> 3366 Met Pro Gln Thr Lys Asp Glu Gly Gly Gly Arg Trp Gly Val Gly Gly Leu Ser Asn Lys Val Trp Cys Cys Arg Thr Phe Ser Phe Phe Phe Phe Phe Phe Phe Leu Phe Phe Phe Phe Phe Phe Val Val Val Val Val Val Phe Val Phe IIe Phe Phe Phe Leu Leu Ser Ser Phe Phe Leu Leu Pro Ser Ser Ser Phe Phe Leu Leu Val Ser Leu Cys Tyr Pro Ala Trp Ser Ala Leu Arg Gln Ser Gln Leu Thr Ala Thr Ser

Thr Cys Gln Val

<210> 3367

<211> 157

<212> PRT

<213> Homo sapiens

<400> 3367

Met Arg Val Leu Ser Arg Gly Gly Phe Gln Arg Val Lys Gly Arg His

1 5 10 15

Leu Pro Gln Leu Met Pro Gln Ser Ala Ala Pro Gln Val Ala Glu Glu
20 25 30

Gly Leu Phe Pro Gly Met Ile Leu Gln Thr Asn Ile Lys Ala Ile Val
35 40 45

Pro Leu Gly Leu Cys Leu Gly Arg Leu Lys Leu Arg Lys Leu Pro Lys
50 55 60

Val Ala Val Leu Met Ser Ala Ala Leu Lys Pro Lys Asp Met Gln Phe
65 70 75 80

Phe Phe Phe Phe Glu Met Glu Ser Cys Pro Val Ala Arg Leu Glu
85 90 95

Cys Ser Gly Val Ile Leu Ala His Cys Asn Leu Arg Leu Pro Gly Ser 100 105 110

Ser Asp Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile Thr Gly Thr
115 120 125

Cys His Tyr Thr Gln Ile Val Phe Val Phe Leu Val Glu Met Gly Phe 130 135 140

His His Val Gly Gln Asp Gly Leu Asp Leu Leu Thr Leu 145 150 155

<210> 3368 <211> 342 <212> PRT <213> Homo sapiens <400> 3368 Met Asn Pro Ser Glu Met Gln Gly Lys Ala Pro Pro Gln Arg Gln Arg Thr Arg Asn Arg Thr Ser Leu Thr Arg Arg Val Asn Lys Met Val Ile Ser Glu Glu Gln Met Lys Leu Pro Ser Thr Lys Lys Ala Gly Pro Pro Thr Trp Ala Gln Leu Lys Lys Leu Thr Gln Leu Ala Glu Lys Ser Leu Glu Asn Thr Arg Val Thr Gln Thr Pro Glu Asn Lys Leu Leu Ala Ala Leu Met Ile Val Ser Thr Val Val Ser Leu Pro Met Ser Ala Gly Ala Ala Thr Ala Asn Tyr Thr Tyr Trp Ala Tyr Val Pro Phe Pro Pro Leu Ile Arg Ala Val Thr Trp Ile Asp Asn Pro Ile Glu Val Tyr Val Asn Asn Ser Ala Trp Val Pro Gly Pro Thr Asp Asp Arg Gly Pro Ala Gln

Gln Asn Trp Leu Val Glu Glu Pro Thr Val Ser Ala Thr Ser Lys Phe

Pro Glu Glu Glu Gly Met Met Ile Asn Ile Ser Ile Gly Tyr His Tyr

Pro Ser Ile Cys Leu Gly Lys Thr Pro Gly Cys Leu Met Pro Thr Ile

Thr Tyr His Met Ile Ser Gly Met Ser Leu Gly Ser Gln Met Asn Asn Leu Gln Asn Ser Ser Tyr Gln Arg Ser Leu Lys Phe Arg Pro Lys Trp Lys Pro Cys Gln Lys Glu Ile Pro Glu Glu Ser Lys Asp Pro Glu Val Leu Val Trp Glu Glu Cys Val Ala Asp Thr Ala Val Val Leu Gln Asn Asn Lys Phe Arg Ile Ile Ile Asp Trp Ala Pro Arg Gly Gln Leu Tyr Tyr Asp Cys Met Gly Gln Thr His Ser Cys Ser Gln Ala Pro Ser Val Trp Pro Thr Asn Leu Ala Tyr Asp Gly Asp Leu Thr Lys Arg Leu Asp Gln Val Tyr Arg Arg Leu Glu Ser Pro Tyr Ser Trp Lys Trp Gly Glu Lys Gly Ile Pro Ser Pro Arg Pro Lys Leu Val Ser Pro Val Val Gly

Pro Glu His Pro Glu Leu

<210> 3369

<211> 377

<212> PRT

<213> Homo sapiens

<400> 3369

Met	Pro	Arg	Arg	Leu	Gln	Pro	Arg	Gly	Ala	Gly	Thr	Lys	Gly	Pro	Pro
1		-		5					10					15	•
Ala	Pro	Ala	Pro	Ala	Ala	Ser	Gly	Ala	Ala	Arg	Asn	Ser	His	Ser	Ala
			20					25					30		
Ala	Ser	Arg	Asp	Pro	Pro	Ala	Ser	Ala	Lys	Pro	Leu	Leu	Arg	Trp	Asp
		35					40					45			
Glu	Val	Pro	Asp	Asp	Phe	Val	Glu	Cys	Phe	Ile	Leu	Ser	Gly	Tyr	Arg
	50					55					60				
Arg	Leu	Pro	Cys	Thr	Ala	Gln	Glu	Cys	Leu	Ala	Ser	Val	Leu	Lys	Pro
65					70					75					80
Thr	Asn	Glu	Thr	Leu	Asn	Phe	Trp	Thr	His	Phe	Ile	Pro	Leu	Leu	Leu
				85					90					95	
Phe	Leu	Ser	Lys	Phe	Cys	Arg	Leu	Phe	Phe	Leu	Ser	Gly	Gly	Asp	Val
			100					105					110		
Pro	Phe	His	His	Pro	Trp	Leu	Leu	Pro	Leu	Trp	Cys	Tyr	Ala	Ser	Gly
		115					120					125			
Val	Leu	Leu	Thr	Phe	Ala	Met	Ser	Cys	Thr	Ala	His	Val	Phe	Ser	Cys
	130					135					140				
Leu	Ser	Leu	Arg	Leu	Arg	Ala	Ala	Phe	Phe	Tyr	Leu	Asp	Tyr	Ala	Ser
145					150					155					160
Ile	Ser	Tyr	Tyr	Gly	Phe	Gly	Ser	Thr	Val	Ala	Tyr	Tyr	Tyr	Tyr	Leu
				165					170					175	
Leu	Pro	Gly	Leu	Ser	Leu	Leu	Asp	Ala	Arg	Val	Met	Thr	Pro	Tyr	Leu
			180					185					190		
Gln	Gln	Arg	Leu	Gly	Trp	His	Val	Asp	Cys	Thr	Arg	Leu	Ile	Ala	Ala
		195					200					205			
Tyr	Arg	Ala	Leu	Val	Leu	Pro	Val	Ala	Phe	Val	Leu	Ala	Val	Ala	Cys
	210					215		•			220				
Thr	Val	Ala	Cys	Cys	Lys	Ser	Arg	Thr	Asp	Trp	Cys	Thr	Tyr	Pro	Phe

Ala Leu Arg Thr Phe Val Phe Val Met Pro Leu Ser Met Ala Cys Pro Ile Met Leu Glu Ser Trp Leu Phe Asp Leu Arg Gly Glu Asn Pro Thr Leu Phe Val His Phe Tyr Arg Arg Tyr Phe Trp Leu Val Val Ala Ala Phe Phe Asn Val Ser Lys Ile Pro Glu Arg Ile Gln Pro Gly Leu Phe Asp Ile Ile Gly His Ser His Gln Leu Phe His Ile Phe Thr Phe Leu Ser Ile Tyr Asp Gln Val Tyr Tyr Val Glu Glu Gly Leu Arg Gln Phe Leu Gln Ala Pro Pro Ala Ala Pro Thr Phe Ser Gly Thr Val Gly Tyr Met Leu Leu Val Val Cys Leu Gly Leu Val Ile Arg Lys Phe Leu Asn Ser Ser Glu Phe Cys Ser Lys Lys

<210> 3370

<211> 193

<212> PRT

<213> Homo sapiens

<400> 3370

Met Pro Ala Ser Ser Leu Leu Ser Ile Leu Pro Pro Arg Tyr Ile Ser

1 5 10 15

Asn Leu Pro Thr Phe Leu Glu Leu His Ile Thr Asp Leu Val Gln Ala Ile Ile Ile Ser Leu Leu Gly Pro Thr Lys Thr Leu Ile Thr Val Leu Phe Val Ser Phe Cys Leu Phe Leu Arg Gln Ser Leu Ile Leu Ile Thr Gln Ala Gly Val Gln Trp His Asp Leu Ser Ser Leu Gln Pro Leu Pro Pro Met Phe Lys Arg Phe Ser Cys Leu Ser Leu Pro Arg Ser Trp Asp Tyr Trp His Ala Pro Pro His Gln Ala Asn Phe Ile Phe Leu Val Glu Met Gly Phe His Pro Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Ser Ala Ser Arg Ser Ala Gly Ile Thr Gly Met Asn His His Gly Arg Leu Thr Phe Ile Leu Ser Leu Val Leu Leu Glu Tyr Ser Gln Ile Ile Phe His Cys Val Tyr Ile Pro His Phe Ala His

Trp Phe Leu Met Val Arg Ser Glu Leu Trp Val Asp Leu Ala Ile Gly

Arg

<210> 3371

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3371

Met Phe Arg Lys Thr Thr Ser Phe Phe Phe Phe Phe Trp Arg Gln Gly

1 5 10 15

Leu Ala Leu Ser Pro Arg Leu Gly Cys Ser Gly Val Ile Leu Ala His

20 25 30

Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser

35 40 45

Gly Val Ala Gly Ile Thr Gly Ile Cys Asp His Ala Arg Leu Ile Phe

50 55 60

Val Phe Ser Val Glu Thr Gly Phe His His Val Gly Gln Ala Gly Leu

65 70 75 80

Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Trp Ala Ser Gln Ser Ala

85 90 95

Gln Ile Thr Gly Val Ser His Arg Ala Gln Ser Glu Asn Tyr Leu Tyr

100 105 110

Tyr Cys Ser Cys Ile Leu Lys Asn Ser Leu Arg Pro

115 120

<210> 3372

<211> 515

<212> PRT

<213> Homo sapiens

<400> 3372

Met Leu Met His Trp Gly Trp Phe Leu Glu His Asp Leu Asp His Thr

1

5

10

Val	Pro	Ala	Leu	Ser	Thr	Ala	Arg	Phe	Ser	Asp	Gly	Arg	Pro	Cys	Asn
			20					25					30		
Ser	Val	Cys	Thr	Asn	Asp	Pro	Pro	Cys	Phe	Pro	Met	Asn	Thr	Arg	His
		35					40					45			
Ala	Asp	Pro	Arg	Gly	Thr	His	Ala	Pro	Cys	Met	Leu	Phe	Ala	Arg	Ser
	50					55					60				
Ser	Pro	Ala	Cys	Ala	Ser	Gly	Arg	Pro	Ser	Ala	Thr	Val	Asp	Ser	Val
65					70				•	75					80
Tyr	Ala	Arg	Glu	Gln	Ile	Asn	Gln	Gln	Thr	Ala	Tyr	Ile	Asp	Gly	Ser
				85					90					95	
Asn	Val	Tyr	Gly	Ser	Ser	Glu	Arg	Glu	Ser	Gln	Ala	Leu	Arg	Asp	Pro
			100					105					110		
Ser	Val	Pro	Arg	Gly	Leu	Leu	Lys	Thr	Gly	Phe	Pro	Trp	Pro	Pro	Ser
		115					120					125			
Gly	Lys	Pro	Leu	Leu	Pro	Phe	Ser	Thr	Gly	Pro	Pro	Thr	Glu	Cys	Ala
	130					135					140				
Arg	Gln	Glu	Gln	Glu	Ser	Pro	Cys	Phe	Leu	Ala	Gly	Asp	His	Arg	Ala
145					150					155					160
Asn	Glu	His	Leu	Ala	Leu	Ala	Ala	Met	His	Thr	Leu	Trp	Phe	Arg	Glu
				165					170					175	
His	Asn	Arg	Val	Ala	Thr	Glu	Leu	Ser	Ala	Leu	Asn	Pro	His	Trp	Glu
			180					185					190		
Gly	Asn	Thr	Val	Tyr	Gln	Glu	Ala	Arg	Lys	Ile	Val	Gly	Ala	Glu	Leu
		195					200					205			
Gln	His	Ile	Thr	Tyr	Ser	His	Trp	Leu	Pro	Lys	Val	Leu	Gly	Asp	Pro
	210					215					220				
Gly	Thr	Arg	Met	Leu	Arg	Gly	Tyr	Arg	Gly	Tyr	Asn	Pro	Asn	Val	Asn
225					230					235					240
Ala	Gly	Ile	Ile	Asn	Ser	Phe	Ala	Thr	Ala	Ala	Phe	Arg	Phe	Gly	His

				245					250					255	
Thr	Leu	Ile	Asn	Pro	Ile	Leu	Tyr	Arg	Leu	Asn	Ala	Thr	Leu	Gly	Glu
			260					265					270		
Ile	Ser	Glu	Gly	His	Leu	Pro	Phe	His	Lys	Ala	Leu	Phe	Ser	Pro	Ser
		275					280					285			
Arg	Ile	Ile	Lys	Glu	Gly	Gly	Ile	Asp	Pro	Val	Leu	Arg	Gly	Leu	Phe
	290					295					300				
Gly	Val	Ala	Ala	Lys	Trp	Arg	Ala	Pro	Ser	Tyr	Leu	Leu	Ser	Pro	Glu
305					310					315					320
Leu	Thr	Gln	Arg	Leu	Phe	Ser	Ala	Ala	Tyr	Ser	Ala	Ala	Val	Asp	Ser
				325					330					335	
Ala	Ala	Thr	Ile	Ile	Gln	Arg	Gly	Arg	Asp	His	Gly	Ile	Pro	Pro	Tyr
			340					345					350		
Val	Asp	Phe	Arg	Val	Phe	Cys	Asn	Leu	Thr	Ser	Val	Lys	Asn	Phe	Glu
		355					360					365			
Asp	Leu	Gln	Asn	Glu	Ile	Lys	Asp	Ser	Glu	Ile	Arg	Gln	Lys	Leu	Arg
	370					375					380				
Lys	Leu	Tyr	Gly	Ser	Pro	Gly	Asp	Ile	Asp	Leu	Trp	Pro	Ala	Leu	Met
385					390					395					400
Val	Glu	Asp	Leu	Ile	Pro	Gly	Thr	Arg	Val	Gly	Pro	Thr	Leu	Met	Cys
				405					410					415	
Leu	Phe	'Val	Thr	Gln	Phe	Gln	Arg	Leu	Arg	Asp	Gly	Asp	Arg	Phe	Trp
			420					425					430		
Tyr	Glu	Asn	Pro	Gly	Val	Phe	Thr	Pro	Ala	Gln	Leu	Thr	Gln	Leu	Lys
		435					440					445			
Gln	Ala	Ser	Leu	Ser	Arg	Val	Leu	Cys	Asp	Asn	Gly	Asp	Ser	Ile	Gln
	450					455					460				
Gln	Val	Gln	Ala	Asp	Val	Phe	Val	Lys	Ala	Glu	Tyr	Pro	Gln	Asp	Tyr
465					470					475					480

Leu Asn Cys Ser Glu Ile Pro Lys Val Asp Leu Arg Val Trp Gln Asp 485

Cys Cys Ala Asp Lys Gln Ala Gly Gly Thr Pro Glu Ala Gly Arg Val 500

Tyr Arg Cys 515

<210> 3373 <211> 166

<212> PRT

<213> Homo sapiens

<400> 3373

Met Trp Thr Glu Trp Gly Pro Val Gly Gly Pro Ser Ala Ala Pro Tyr

1 5 10 15

Gly Gln Asp Pro His Arg Leu Gly Cys Ser Gly Pro Gln Val Ala Leu

20 25 30

Val Trp Gly Glu Lys Ala Gln Gln Ala Glu Pro Gly Phe Leu Pro His

40
45

Pro His Ile Pro Val Tyr Leu Leu Asp Leu Gln Pro Gln Ile Pro Gly
50 55 60

Pro Leu Thr Trp Leu Arg Asn Arg Val Arg Ala Gly Val Leu Ser Arg
65 70 75 80

Gly Trp Ala Arg Glu Pro Gly Ser Gly Arg Gln Ser Trp Cys Pro Gly
85 90 95

Gly Gly Gly Pro Gly Arg Leu His Trp Glu Pro Ala Pro Gly Trp Gly
100 105 110

Val Pro Gln Ala Tyr Arg Glu Gln Thr Leu Leu Arg Arg Gly Gly

Leu Gln Pro Ala Val Leu Ser Leu Arg Val Leu His Leu Leu Asp Ala Gly Thr Gln Gln Leu Ile Leu Glu Gln Gly Arg Val Gly Gln Ala Val Cys Gly His Gln Ala Gln <210> 3374 <211> 868 <212> PRT <213> Homo sapiens <400> 3374 Met Trp Pro Arg Leu Ala Phe Cys Cys Trp Gly Leu Ala Leu Val Ser Gly Trp Ala Thr Phe Gln Gln Met Ser Pro Ser Arg Asn Phe Ser Phe Arg Leu Phe Pro Glu Thr Ala Pro Gly Ala Pro Gly Ser Ile Pro Ala Pro Pro Ala Pro Gly Asp Glu Ala Ala Gly Ser Arg Val Glu Arg Leu Gly Gln Ala Phe Arg Arg Arg Val Arg Leu Leu Arg Glu Leu Ser Glu Arg Leu Glu Leu Val Phe Leu Val Asp Asp Ser Ser Ser Val Gly Glu

Val Asn Phe Arg Ser Glu Leu Met Phe Val Arg Lys Leu Leu Ser Asp

Phe	Pro	Val	Val	Pro	Thr	Ala	Thr	Arg	Val	Ala	Ile	Val	Thr	Phe	Ser
		115					120					125			
Ser	Lys	Asn	Tyr	Val	Val	Pro	Arg	Val	Asp	Tyr	Ile	Ser	Thr	Arg	Arg
	130					135					140				
Ala	Arg	Gln	His	Lys	Cys	Ala	Leu	Leu	Leu	Gln	Glu	Ile	Pro	Ala	Ile
145					150					155					160
Ser	Tyr	Arg	Gly	Gly	Gly	Thr	Tyr	Thr	Lys	Gly	Ala	Phe	Gln	Gln	Ala
				165					170					175	
Ala	Gln	Ile	Leu	Leu	His	Ala	Arg	Glu	Asn	Ser	Thr	Lys	Val	Val	Phe
			180					185					190		
Leu	Ile	Thr	Asp	Gly	Tyr	Ser	Asn	Gly	Gly	Asp	Pro	Arg	Pro	Ile	Ala
		195					200					205			
Ala	Ser	Leu	Arg	Asp	Ser	Gly	Val	Glu	Ile	Phe	Thr	Phe	Gly	Ile	Trp
	210					215					220				
Gln	Gly	Asn	Ile	Arg	Glu	Leu	Asn	Asp	Met	Ala	Ser	Thr	Pro	Lys	Glu
225					230					235					240
Glu	His	Cys	Tyr	Leu	Leu	His	Ser	Phe	Glu	Glu	Phe	Glu	Ala	Leu	Ala
				245					250					255	
Arg	Arg	Ala	Leu	His	Glu	Asp	Leu	Pro	Ser	Gly	Ser	Phe	Ile	Gln	Asp
			260					265		•			270		
Asp	Met	Val	His	Cys	Ser	Tyr	Leu	Cys	Asp	Glu	Gly	Lys	Asp	Cys	Cys
		275					280					285			
Asp	Arg	Met	Gly	Ser	Cys	Lys	Cys	Gly	Thr	His	Thr	Gly	His	Phe	Glu
	290					295					300				
Cys	Ile	Cys	Glu	Lys	Gly	Tyr	Tyr	Gly	Lys	Gly	Leu	Gln	Tyr	Glu	Cys
305					310					315					320
Thr	Ala	Cys	Pro	Ser	Gly	Thr	Tyr	Lys	Pro	Glu	Gly	Ser	Pro	Gly	Gly
				325					330					335	
He	Ser	Ser	Cvs	Ile	Pro	Cvs	Pro	Asp	Glu	Asn	His	Thr	Ser	Pro	Pro

			340					345					350		
Gly	Ser	Thr	Ser	Pro	Glu	Asp	Cys	Val	Cys	Arg	Glu	Gly	Tyr	Arg	Ala
		355					360					365			
Ser	Gly	Gln	Thr	Cys	Glu	Leu	Val	His	Cys	Pro	Ala	Leu	Lys	Pro	Pro
	370					375					380				
Glu	Asn	Gly	Tyr	Phe	Ile	Gln	Asn	Thr	Cys	Asn	Asn	His	Phe	Asn	Ala
385					390					395					400
Ala	Cys	Gly	Val	Arg	Cys	His	Pro	Gly	Phe	Asp	Leu	Val	Gly	Ser	Ser
				405					410					415	
Ile	Ile	Leu	Cys	Leu	Pro	Asn	Gly	Leu	Trp	Ser	Gly	Ser	Glu	Ser	Tyr
			420					425					430		
Cys	Arg	Val	Arg	Thr	Cys	Pro	His	Leu	Arg	Gln	Pro	Lys	His	Gly	His
		435					440					445			
Ile	Ser	Cys	Ser	Thr	Arg	Glu	Met	Leu	Tyr	Lys	Thr	Thr	Cys	Leu	Val
	450					455					460				
Ala	Cys	Asp	Glu	Gly	Tyr	Arg	Leu	Glu	Gly	Ser	Asp	Lys	Leu	Thr	Cys
465					470					475					480
Gln	Gly	Asn	Ser	Gln	Trp	Asp	Gly	Pro	Glu	Pro	Arg	Cys	Val	Glu	Arg
				485					490					495	
His	Cys	Ser	Thr	Phe	Gln	Met	Pro	Lys	Asp	Val	Ile	Ile	Ser	Pro	His
			500					505					510		
Asn	Cys	Gly	Lys	Gln	Pro	Ala	Lys	Phe	Gly	Thr	Ile	Cys	Tyr	Val	Ser
		515					520					525			
Cys	Arg	Gln	Gly	Phe	Ile	Leu	Ser	Gly	Val	Lys	Glu	Met	Leu	Arg	Cys
	530					535					540				
Thr	Thr	Ser	Gly	Lys	Trp	Asn	Val	Gly	Val	Gln	Ala	Ala	Val	Cys	Lys
545					550					555					560
Asp	Val	Glu	Ala	Pro	Gln	Ile	Asn	Cys	Pro	Lys	Asp	Ile	Glu	Ala	Lys
				565	•				570					575	

Ala	Leu	Glu	Gln	Gln	Asp	Ser	Ala	Asn	Val	Thr	Trp	Gln	Ile	Pro	Thr
			580					585					590		
Ala	Lys	Asp	Asn	Ser	Gly	Glu	Lys	Val	Ser	Val	His	Val	His	Pro	Ala
		595					600					605			
Phe	Thr	Pro	Pro	Tyr	Leu	Phe	Pro	Ile	Gly	Asp	Val	Ala	Ile	Val	Tyr
	610					615					620				
Thr	Ala	Thr	Asp	Leu	Ser	Gly	Asn	Gln	Ala	Ser	Cys	Ile	Phe	His	Ile
625					630					635					640
Lys	Val	Ile	Asp	Ala	Glu	Pro	Pro	Val	Ile	Asp	Trp	Cys	Arg	Ser	Pro
				645					650					655	
Pro	Pro	Val	Gln	Val	Ser	Glu	Lys	Val	His	Ala	Ala	Ser	Trp	Asp	Glu
			660					665					670		
Pro	Gln	Phe	Ser	Asp	Asn	Ser	Gly	Ala	Glu	Leu	Val	Ile	Thr	Arg	Ser
		675					680					685			
His	Thr	Gln	Gly	Asp	Leu	Phe	Pro	Gln	Gly	Glu	Thr	Ile	Val	Gln	Tyr
	690					695					700				
Thr	Ala	Thr	Asp	Pro	Ser	Gly	Asn	Asn	Arg	Thr	Cys	Asp	Ile	His	Ile
705					710					715					720
Val	Ile	Lys	Gly	Ser	Pro	Cys	Glu	Ile	Pro	Phe	Thr	Pro	Val	Asn	Gly
				725					730					735	
Asp	Phe	Ile	Cys	Thr	Pro	Asp	Asn	Thr	Gly	Val	Asn	Cys	Thr	Leu	Thr
			740					745					750		
Cys	Leu	Glu	Gly	Tyr	Asp	Phe	Thr	Glu	Gly	Ser	Thr	Asp	Lys	Tyr	Tyr
		755					760					765			
Cys	Ala	Tyr	Glu	Asp	Gly	Val	Trp	Lys	Pro	Thr	Tyr	Thr	Thr	Glu	Trp
	770					775					780				
Pro	Asp	Cys	Ala	Lys	Lys	Arg	Phe	Ala	Asn	His	Gly	Phe	Lys	Ser	Phe
785					790					795					800
Glu	Met	Phe	Tyr	Lys	Ala	Ala	Arg	Cvs	Asp	Asp	Thr	Asp	Leu	Met	Lys

Lys Phe Ser Glu Ala Phe Glu Thr Thr Leu Gly Lys Met Val Pro Ser Phe Cys Ser Asp Ala Glu Asp Ile Asp Cys Arg Leu Glu Glu Asn Leu Thr Lys Lys Tyr Cys Leu Glu Tyr Asn Tyr Asp Tyr Glu Asn Gly Phe Ala Ile Gly Asn <210> 3375 <211> 166 <212> PRT <213> Homo sapiens <400> 3375 Met Ser Val Pro His Ala His Thr Gln Ser Cys Asn Asp Asn Gly Lys Lys Cys Leu Leu Thr Leu Pro Asn Val Pro Ser Gly Gly Lys Leu Pro Leu Val Glu Asn His Cys Ser Ile Pro Phe His Gln Leu Arg Asp Pro Pro Pro Ser Leu Arg His Leu Gln Asp Leu Val Leu Phe Trp Ser Gly

Pro Leu Gln Thr Leu Asn His Gln Pro Ala Ala Phe Val Val Leu Asp

Val Ser Ala Asn Phe Ala Gly His Thr Gly Val Pro Lys Glu Val Lys

Val Ile Ile Leu Gly Arg Glu Gly Glu Gly Ser Lys Arg Gly Arg Met 100 105 110 Arg Phe Leu Gly Arg Gly Gly Val Lys Leu Val Pro Val Leu Cys Tyr 120 125 115 Cys Leu Leu Pro Ser Tyr Leu Asn Leu Lys Glu Leu Pro His Leu Gln 130 135 140 Gln Asp Leu Leu Gly Ile Gly Val Leu Leu Leu Ala Ile Asn Ser Cys 145 150 155 160 Leu Gln Gly Lys Gly Gly 165

<210> 3376

<211> 559

<212> PRT

<213> Homo sapiens

<400> 3376

Met Ala Gly Leu Thr Ala Ala Ala Pro Arg Pro Gly Val Leu Leu
1 5 10 15

Leu Leu Ser Ile Leu His Pro Ser Arg Pro Gly Gly Val Pro Gly Ala
20 25 30

Ile Pro Gly Gly Val Pro Gly Gly Val Phe Tyr Pro Ala Leu Gly Pro
35 40 45

Gly Gly Lys Pro Leu Lys Pro Val Pro Gly Gly Leu Ala Gly Ala Gly 50 55 60

Leu Gly Ala Gly Leu Gly Ala Phe Pro Ala Val Thr Phe Pro Gly Ala 65 70 75 80

Leu Val Pro Gly Gly Val Ala Asp Ala Ala Ala Ala Tyr Lys Ala Ala

				85					90					95	
Lys	Ala	Gly	Ala	Gly	Leu	Gly	Gly	Val	Pro	Gly	Val	Gly	Gly	Leu	Gly
			100					105					110		
Val	Ser	Ala	Ala	Pro	Ser	Val	Pro	Gly	Ala	Val	Val	Pro	Gln	Pro	Gly
		115					120					125			
Ala	Gly	Val	Lys	Pro	Gly	Lys	Val	Pro	Gly	Val	Gly	Leu	Pro	Gly	Val
	130					135					140				
Tyr	Pro	Gly	Gly	Val	Leu	Pro	Gly	Ala	Arg	Phe	Pro	Gly	Val	Gly	Val
145					150					155					160
Leu	Pro	Gly	Val	Pro	Thr	Gly	Ala	Gly	Val	Lys	Pro	Lys	Ala	Pro	Gly
				165					170					175	
Val	Gly	Gly	Ala	Phe	Ala	Gly	Ile	Pro	Gly	Val	Gly	Pro	Phe	Gly	Gly
			180					185					190		
Pro	Gln	Pro	Gly	Val	Pro	Leu	Gly	Tyr	Pro	Ile	Lys	Ala	Pro	Lys	Leu
		195					200					205			
Pro	Gly	Gly	Tyr	Gly	Leu	Pro	Tyr	Thr	Thr	Gly	Lys	Leu	Pro	Tyr	Gly
	210					215				•	220				
Tyr	Gly	Pro	Gly	Gly	Val	Ala	Gly	Ala	Ala	Gly	Lys	Ala	Gly	Tyr	Pro
225					230					235					240
Thr	Gly	Thr	Gly	Val	Gly	Pro	Gln	Ala	Lys						
				245					250					255	
Ala	Ala	Ala	Lys	Phe	Gly	Ala	Gly	Ala	Ala	Gly	Val	Leu	Pro	Gly	Val
			260					265					270		
Gly	Gly	Ala	Gly	Val	Pro	Gly	Val	Pro	Gly	Ala	Ile	Pro	Gly	Ile	Gly
		275					280					285			
Gly	Ile	Ala	Gly	Val	Gly	Thr	Pro	Ala							
	290					295					300				
Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Ala	Ala	Gly	Leu	Val	Pro	Gly
305					310					315					320

Gly	Pro	Gly	Phe	Gly	Pro	Gly	Val	Val	Gly	Val	Pro	Gly	Ala	Gly	Val
				325					330					335	
Pro	Gly	Val	Gly	Val	Pro	Gly	Ala	Gly	Ile	Pro	Val	Val	Pro	Gly	Ala
			340					345					350		
Gly	Ile	Pro	Gly	Ala	Ala	Val	Pro	Gly	Val	Val	Ser	Pro	Glu	Ala	Ala
		355					360					365			
Ala	Lys	Ala	Ala	Ala	Lys	Ala	Ala	Lys	Tyr	Gly	Ala	Arg	Pro	Gly	Val
	370					375					380				
Gly	Val	Gly	Gly	Ile	Pro	Thr	Tyr	Gly	Val	Gly	Ala	Gly	Gly	Phe	Pro
385					390					395					400
Gly	Phe	Gly	Val	Gly	Val	Gly	Gly	Ile	Pro	Gly	Val	Ala	Gly	Val	Pro
				405					410					415	
Gly	Val	Gly	Gly	Ser	Arg	Ser	Arg	Arg	Cys	Pro	Gly	Ser	Trp	His	Phe
			420					425					430		
Pro	Arg	Ser	Ser	Gly	Ser	Ser	Cys	Arg	Gln	Gly	Cys	Gln	Val	Arg	Val
		435					440					445			
Ser	Ser	Trp	Cys	Arg	Arg	Gly	Ser	Trp	Ser	Trp	Arg	Gly	Ser	Trp	Cys
	450	•				455					460				
Arg	Cys	Gly	Ser	Trp	Ser	Trp	Leu	Gly	Ser	Trp	Ser	Trp	Arg	Gly	Ser
465					470					475					480
Trp	Ser	Trp	Cys	Gly	Ser	Trp	Arg	Trp	Arg	Gly	Ser	Arg	His	Trp	Pro
				485					490					495	
Trp	Trp	Ser	Cys	Ser	Cys	Ser	Lys	Ile	Arg	Cys	Gln	Gly	Gly	Cys	Gln
			500					505					510		
Ser	Pro	Ala	Pro	Ser	Cys	Ser	Trp	Ala	Trp	Cys	Trp	His	Pro	Trp	Thr
		515					520					525			
Trp	Ser	Trp	Cys	Arg	Arg	Pro	Trp	Thr	Trp	Ser	Trp	Cys	Trp	Cys	Ser
	530					535					540				
Trp	Thr	Trn	Ser	Trn	Cvs	Trn	Cvs	Ser	Trn	Leu	Arø	Glv	Ser	Thr	

545 550 555

<210> 3377

<211> 190

<212> PRT

<213> Homo sapiens

<400> 3377

Met Glu Gly Ser Arg Pro Ala Ala Pro Ala Glu Pro Gly Thr Leu Lys

1 5 10 15

Thr Ser Leu Val Ala Thr Pro Gly Ile Asp Lys Leu Thr Glu Lys Ser

20 25 30

Gln Val Ser Glu Asp Gly Thr Leu Arg Ser Leu Glu Pro Glu Pro Gln

35 40 45

Gln Ser Leu Glu Asp Gly Ser Pro Ala Lys Gly Glu Pro Ser Gln Ala

50 55 60

Trp Arg Glu Gln Arg Arg Pro Ser Thr Ser Ser Ala Ser Gly Gln Trp

65 70 75 80

Ser Pro Thr Pro Glu Trp Val Leu Ser Trp Lys Ser Lys Leu Pro Leu

85 90 95

Gln Thr Ile Met Arg Leu Leu Gln Val Leu Val Pro Gln Val Glu Lys

100 105 110

Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu Ser Glu Ile Leu Arg Phe

115 120 125

Leu Gln His Gly Thr Leu Val Gly Leu Leu Pro Val Pro His Pro Ile

130 135 140

Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly Thr Ala Met Trp Phe Arg

145 150 155 160

Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg Asn Val Asp Pro Pro Val
165 170 175

Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu Ile Gln Arg Val

180 185 190

<210> 3378

<211> 166

<212> PRT

<213> Homo sapiens

<400> 3378

Met Lys Pro His Lys Ser Leu Ala Arg His Ile Ile Ile Pro Val Leu 1 5 10 15

Leu Ser Arg Lys Leu Ser Glu Arg Asp Tyr Arg Asn Cys Pro Gly His
20 25 30

Pro Ala Gly Lys Trp Arg Ile Gln Val Ser Thr Pro Gly Pro Ala Pro
35 40 45

Ala Tyr Phe Leu Phe Ser Met Cys Glu Ile Gln Cys Tyr Pro Val Ser
50 55 60

Glu Ser Ser Val Arg Cys Gly Ser Cys His Pro Phe Leu Trp Pro Cys
65 70 75 80

Ser Leu Arg Leu Phe Lys Leu Leu Leu Leu Ser Arg Thr Leu Phe His
85 90 95

Ile Ser Gln Pro Leu Asn Cys Leu Asn Gly Pro Arg Cys Leu Arg Pro
100 105 110

Ile Thr Ser Gly His Ala Lys Val Gly Phe Ala Val Pro Arg Arg Asp 115 120 125

Cys Ser Ala Gln Pro Arg Leu Pro Phe Pro Leu Pro Val Pro Ile Leu

160

155

130 135 140

150

Pro Cys Thr Ile Cys Pro Leu His Gly Gln Gly Arg Gly Pro Ser Gly

Leu Phe Ala Gln Lys Ile

165

<210> 3379

145

<211> 538

<212> PRT

<213> Homo sapiens

<400> 3379

Met Gly Leu Leu Leu Val Leu Ile Leu Thr Pro Ser Leu Ala Ala
1 5 10 15

Tyr Arg His Pro Asp Phe Pro Leu Leu Glu Lys Ala Gln Gln Leu Leu

20 25 30

Gln Ser Thr Gly Ser Pro Tyr Ser Thr Asn Cys Trp Leu Cys Thr Ser

35 40 45

Ser Ser Thr Glu Thr Pro Gly Thr Ala Tyr Pro Ala Ser Pro Arg Glu
50 55 60

Trp Thr Ser Ile Glu Ala Glu Leu His Ile Ser Tyr Arg Trp Asp Pro 65 70 75 80

Asn Leu Lys Gly Leu Met Arg Pro Ala Asn Ser Leu Leu Ser Thr Val 85 90 95

Lys Gln Asp Phe Pro Asp Ile Arg Gln Lys Pro Pro Ile Phe Gly Pro
100 105 110

Ile Phe Thr Asn Ile Asn Leu Met Gly Ile Ala Pro Ile Cys Val Met
115 120 125

Ala	Lys	Arg	Lys	Asn	Gly	Thr	Asn	Val	Gly	Thr	Leu	Pro	Ser	Thr	Val
	130					135					140				
Cys	Asn	Val	Thr	Phe	Thr	Val	Asp	Ser	Asn	Gln	Gln	Thr	Tyr	Gln	Thr
145					150					155					160
Tyr	Thr	His	Asn	Gln	Phe	Arg	His	Gln	Pro	Arg	Phe	Pro	Lys	Pro	Pro
				165					170					175	
Asn	Ile	Thr	Phe	Pro	Gln	Gly	Thr	Leu	Leu	Asp	Lys	Ser	Ser	Arg	Phe
•			180					185					190		
Cys	Gln	Gly	Arg	Pro	Ser	Ser	Cys	Ser	Thr	Arg	Asn	Phe	Trp	Phe	Arg
		195					200					205			
Pro	Ala	Asp	Tyr	Asn	Gln	Cys	Leu	Gln	Ile	Ser	Asn	Leu	Ser	Ser	Thr
	210					215					220				
Ala	Glu	Trp	Val	Leu	Leu	Asp	Gln	Thr	Arg	Asn	Ser	Leu	Phe	Trp	Glu
225					230					235					240
Asn	Lys	Thr	Lys	Gly	Ala	Asn	Gln	Ser	Gln	Thr	Pro	Cys	Val	Gln	Val
				245					250					255	
Leu	Ala	Gly	Met	Thr	Ile	Ala	Thr	Ser	Tyr	Leu	Gly	Ile	Ser	Ala	Val
			260					265					270		
Ser	Glu	Phe	Phe	Gly	Thr	Ser	Leu	Thr	Pro	Leu	Phe	His	Phe	His	Ile
		275					280					285			
Ser	Thr	Cys	Leu	Lys	Thr	Gln	Gly	Ala	Phe	Tyr	Ile	Cys	Gly	Gln	Ser
	290					295					300				
Ile	His	Gln	Cys	Leu	Pro	Ser	Asn	Trp	Thr	Gly	Thr	Cys	Thr	Ile	Gly
305					310					315					320
Tyr	Val	Thr	Pro	Asp	Ile	Phe	Ile	Ala	Pro	Gly	Asn	Leu	Ser	Leu	Pro
				325					330					335	
Ile	Pro	Ile	Tyr	Gly	Asn	Ser	Pro	Leu	Pro	Arg	Val	Arg	Arg	Ala	Ile
			340					345					350		
His	Phe	He	Pro	Leu	Leu	Ala	Glv	Leu	Glv	He	Leu	Ala	Glv	Thr	Glv

Thr Gly Ile Ala Gly Ile Thr Lys Ala Ser Leu Thr Tyr Ser Gln Leu Ser Lys Glu Ile Ala Asn Asn Ile Asp Thr Met Ala Lys Ala Leu Thr Thr Met Gln Glu Gln Ile Asp Ser Leu Ala Ala Val Val Leu Gln Asn Arg Arg Gly Leu Asp Met Leu Thr Ala Ala Gln Gly Gly Ile Cys Leu Ala Leu Asp Glu Lys Cys Cys Phe Trp Val Asn Gln Ser Gly Lys Val Gln Asp Asn Ile Arg Gln Leu Leu Asn Gln Ala Ser Ser Leu Arg Glu Arg Ala Thr Gln Gly Trp Leu Asn Trp Glu Gly Thr Trp Lys Trp Phe Ser Trp Val Leu Pro Leu Thr Gly Pro Leu Val Ser Leu Leu Leu Leu Leu Phe Gly Pro Cys Leu Leu Asn Leu Ile Thr Gln Phe Val Ser Ser Arg Leu Gln Ala Ile Lys Leu Gln Thr Asn Leu Ser Ala Gly Arg His Pro Arg Asn Ile Gln Glu Ser Pro Phe

<210> 3380

<211> 247

<212> PRT

<213> Homo sapiens

<400> 3380

Met Ala Thr Thr Ile Ser Lys Leu Lys Val Asp Leu Asp Phe Asp Ser

1 5 10 15

Ser Ser Ile Ser Gln Ile His Leu Val Leu Phe Gly Phe Gln Asp Ala 20 25 30

Val Asn Lys Ile Leu Arg Asn His Leu Ile Arg Pro His Trp Met Phe 35 40 45

Ala Met Asp Asn Ile Ile Arg Arg Ala Val Gln Ala Ala Val Thr Ile 50 55 60

Leu Ile Pro Glu Leu Arg Ala His Phe Glu Pro Thr Cys Glu Thr Glu
65 70 75 80

Gly Val Asp Lys Asp Met Asp Glu Ala Glu Glu Gly Tyr Pro Pro Ala 85 90 95

Thr Gly Pro Gly Gln Glu Ala Gln Pro His Gln Gln His Leu Ser Leu
100 105 110

Gln Leu Gly Glu Leu Arg Gln Glu Thr Asn Arg Leu Leu Glu His Leu 115 120 125

Val Glu Lys Glu Arg Glu Tyr Gln Asn Leu Leu Arg Gln Thr Leu Glu 130 135 140

Gln Lys Thr Gln Glu Leu Tyr His Leu Gln Leu Lys Leu Lys Ser Asn 145 150 155 160

Cys Ile Thr Glu Asn Pro Ala Gly Pro Tyr Gly Gln Arg Thr Asp Lys
165 170 175

Glu Leu Ile Gly Trp Leu Arg Leu Gln Gly Ala Asp Ala Lys Thr Ile 180 185 190

Glu Lys Ile Val Glu Glu Gly Tyr Thr Leu Ser Asp Ile Leu Asn Glu 195 200 205

Ile Thr Lys Glu Asp Leu Arg Tyr Leu Arg Leu Arg Gly Gly Leu Leu

210 215 220 220 220 220 220 220 220 225 225 230 240 240 245 245 245 245 245 245 245 225 220 240 240 240 245 245

<210> 3381

<211> 275

<212> PRT

<213> Homo sapiens

<400> 3381

Met Glu Glu Val Arg Glu Gly His Ala Leu Gly Gly Gly Met Glu Ala
1 5 10 15

Asp Gly Pro Ala Ser Leu Gln Glu Leu Pro Pro Ser Pro Arg Ser Pro
20 25 30

Ser Pro Ala Ala Pro Glu Ala Pro Glu Leu Pro Glu Pro Ala Gln Pro 50 55 60

Ser Glu Ala His Ala Arg Gln Leu Leu Glu Glu Trp Gly Pro Leu 65 70 75 80

Ser Gly Gly Leu Glu Leu Pro Gln Arg Leu Thr Trp Lys Leu Leu Leu 85 90 95

Leu Arg Arg Pro Leu Tyr Arg Asn Leu Leu Arg Ser Pro Asn Pro Glu
100 105 110

Gly Ile Asn Ile Tyr Glu Pro Ala Pro Pro Thr Gly Pro Thr Gln Arg 115 120 125 Pro Leu Glu Thr Leu Gly Asn Phe Arg Gly Trp Tyr Ile Arg Thr Glu 135 140 130 Lys Leu Gln Gln Asn Gln Ser Trp Thr Val Lys Gln Gln Cys Val Asp 160 150 155 145 Leu Leu Ala Glu Gly Leu Trp Glu Glu Leu Leu Asp Asp Glu Gln Pro 170 165 175 Ala Ile Thr Val Met Asp Trp Phe Glu Asp Ser Arg Leu Asp Ala Cys 180 185 190 Val Tyr Glu Leu His Val Trp Leu Leu Ala Ala Asp Arg Arg Thr Val 200 205 195 Ile Ala Gln His His Val Ala Pro Arg Thr Ser Gly Arg Gly Pro Pro 210 220 215 Gly Arg Trp Val Gln Val Ser His Val Phe Arg His Tyr Gly Pro Gly 225 230 235 240

Gly Gly Leu Arg Arg Thr Arg Val Thr Asp Ser Ser Val Ser Val Gln 260 265 270

Val Arg Phe Ile His Phe Leu His Lys Ala Lys Asn Arg Met Glu Pro

250

Leu Arg Glu

275

245

<210> 3382

<211> 452

<212> PRT

<213> Homo sapiens

<400> 3382

Met Lys Val Gln Pro Ser Val Thr Cys Val Ala Ser Trp Gly Gly Ile

1				5					10					15	
Val	His	Leu	Glu	Ala	Phe	Gly	Asp	Pro	Val	Ile	Val	Leu	Arg	Gly	Ala
٠			20					25	·				30		
Trp	Ala	Val	Pro	Arg	Val	Asp	Cys	Leu	Ile	Asp	Thr	Leu	Arg	Thr	Pro
		35					40					45			
Asn	Ala	Ser	Cys	Met	Arg	Lys	Gly	Thr	His	Leu	Leu	Val	Pro	Cys	Leu
	50					55					60				
Glu	Glu	Glu	Glu	Leu	Ala	Leu	His	Arg	Arg	Arg	Leu	Asp	Met	Ser	Glu
65					70					75					80
Ala	Leu	Pro	Cys	Pro	Gly	Lys	Glu	Thr	Pro	Thr	Pro	Gly	Cys	Arg	Leu
				85					90					95	
Gly	Ala	Leu	Tyr	Trp	Ala	Cys	Val	His	Asn	Asp	Pro	Thr	Gln	Leu	Glr
			100					105					110		
Ala	Ile	Leu	Asp	Gly	Gly	Val	Ser	Pro	Glu	Glu	Ala	Thr	Gln	Val	Asp
		115					120					125			
Ser	Asn	Gly	Arg	Thr	Gly	Leu	Met	Val	Ala	Cys	Phe	His	Gly	Phe	Gln
	130					135					140				
Ser	Val	Val	Ala	Leu	Leu	Ser	His	Cys	Pro	Phe	Leu	Asp	Val	Asn	Gln
145					150					155					160
Gln	Asp	Lys	Gly	Gly	Asp	Thr	Ala	Leu	Met	Leu	Ala	Ala	Gln	Ala	Gly
				165					170					175	
His	Val	Pro	Leu	Val	Ser	Leu	Leu	Leu	Asn	Tyr	Tyr	Val	Gly	Leu	Asp
			180					185					190		
Leu	Glu	Arg	Arg	Asp	Gln	Arg	Gly	Leu	Thr	Ala	Leu	Met	Lys	Ala	Ala
		195					200			•		205			
Met	Arg	Asn	Arg	Cys	Ala	Asp	Leu	Thr	Ala	Val	Asp	Pro	Val	Arg	Gly
	210					215					220				
Lys	Thr	Ala	Leu	Glu	Trp	Ala	Val	Leu	Thr	Asp	Ser	Phe	Asp	Thr	Val
225					230					235					240

Trp	Arg	Ile	Arg	Gln	Leu	Leu	Arg	Arg	Pro	Gln	Val	Glu	Gln	Leu	Ser
				245					250					255	
Arg	His	Tyr	Lys	Pro	Glu	Trp	Pro	Ala	Leu	Ser	Gly	Leu	Val	Ala	Gln
			260					265					270		
Ala	Gln	Ala	Gln	Ala	Gln	Val	Ala	Pro	Ser	Leu	Leu	Glu	Arg	Leu	Gln
		275					280					285			
Ala	Thr	Leu	Ser	Leu	Pro	Phe	Ala	Pro	Ser	Pro	Gln	Glu	Gly	Gly	Val
	290					295					300				
Leu	Asp	His	Leu	Val	Thr	Ala	Thr	Thr	Ser	Leu	Ala	Ser	Pro	Phe	Val
305					310					315					320
Thr	Thr	Ala	Cys	His	Thr	Leu	Cys	Pro	Asp	His	Pro	Pro	Ser	Leu	Gly
				325					330					335	
Thr	Arg	Ser	Lys	Ser	Val	Pro	Glu	Leu	Leu	Gly	Thr	Ala	Pro	Pro	Pro
			340					345					350		
Pro	Leu	Val	Pro	Gln	Ser	Pro	Pro	Gly	Ser	Pro	Gln	Arg	Ser	Pro	Trp
		355					360					365			
Val	Phe	Val	Pro	Tyr	Gln	Ser	Pro	Gln	Gly	Ile	Leu	Ser	Lys	Cys	Leu
	370					375					380				
Gln	Trp	Leu	Gln	Pro	Arg	Asp	Ser	Thr	Ser	Pro	Arg	Pro	Gln	Val	Pro
385		٠			390					395					400
Lys	Ile	Leu	Leu	Ser	Lys	Ala	Ser	Ser	Ser	Ser	His	Gln	Cys	Gln	Pro
				405					410					415	
Lys	Pro	Ser	Pro	Ser	Gly	His	Gln	Ser	Leu	Ala	Leu	Pro	Leu	Trp	Arg
			420					425					430		
Tyr	Gln	Glu	Leu	Arg	Ile	Glu	Lys	Arg	Lys	Gln	Glu	Glu	Glu	Ala	Arg
		435					440					445			
Met	Ala	Gln	Lys												
	450														

<210> 3383

<211> 409

<212> PRT

<213> Homo sapiens

<400> 3383

Met Val Glu Leu Phe IIe Phe Leu Phe Leu Gly Glu Thr Pro Phe
1 5 10 15

Lys Val Val Lys Ser Leu Ser Pro Lys Glu Leu Val Arg Ile His
20 25 30

Val Pro Lys Pro Leu Asp Arg Asn Asp Gly Thr Phe Leu Met Arg Tyr
35 40 45

Arg Met Tyr Glu Thr Val Asp Glu Gly Leu Lys Ile Glu Val Leu Tyr
50 55 60

Gly Asp Glu His Val Ala Gln Ser Pro Tyr Ile Leu Lys Gly Pro Val 65 70 75 80

Tyr His Glu Tyr Cys Glu Cys Pro Glu Asp Pro Gln Ala Trp Gln Lys

85 90 95

Thr Leu Ser Cys Pro Thr Lys Glu Pro Gln Ile Ala Lys Asp Phe Ala 100 105 110

Ser Phe Pro Ser Ile Asn Leu Gln Gln Met Leu Lys Glu Val Pro Lys
115 120 125

Arg Phe Gly Asp Glu Arg Gly Ala Ile Val His Tyr Thr Ile Leu Asn 130 135 140

Asn His Val Tyr Arg Arg Ser Leu Gly Lys Tyr Thr Asp Phe Lys Met 145 150 155 160

Phe Ser Asp Glu IIe Leu Leu Ser Leu Thr Arg Lys Val Leu Leu Pro 165 170 175

A	sp	Leu	Glu	Phe	Tyr	Val	Asn	Leu	Gly	Asp	Trp	Pro	Leu	Glu	His	Arg
				180					185					190		
L	ys	Val	Asn	Gly	Thr	Pro	Ser	Pro	Ile	Pro	Ile	Ile	Ser	Trp	Cys	Gly
			195					200					205			
S	er	Leu	Asp	Ser	Arg	Asp	Val	Val	Leu	Pro	Thr	Tyr	Asp	Ile	Thr	His
		210					215					220				
S	er	Met	Leu	Glu	Ala	Met	Arg	Gly	Val	Thr	Asn	Asp	Leu	Leu	Ser	Ile
2	25					230					235					240
G	ln	Gly	Asn	Thr	Gly	Pro	Ser	Trp	Ile	Asn	Lys	Thr	Glu	Arg	Ala	Phe
					245					250					255	
P	he	Arg	Gly	Arg	Asp	Ser	Arg	Glu	Glu	Arg	Leu	Gln	Leu	Val	Gln	Leu
				260					265					270		
S	er	Lys	Glu	Asn	Pro	Gln	Leu	Leu	Asp	Ala	Gly	Ile	Thr	Gly	Tyr	Phe
			275					280					285			
P	he	Phe	Gln	Glu	Lys	Glu	Lys	Glu	Leu	Gly	Lys	Ala	Lys	Leu	Met	Gly
		290					295					300				
P	he	Phe	Asp	Phe	Phe	Lys	Tyr	Lys	Tyr	Gln	Val	Asn	Val	Asp	Gly	Thr
3	05					310					315					320
V	al	Ala	Ala	Tyr	Arg	Tyr	Pro	Tyr	Leu	Met	Leu	Gly	Asp	Ser	Leu	Val
					325					330					335	
L	eu	Lys	Gln	Asp	Ser	Pro	Tyr	Tyr	Glu	His	Phe	Tyr	Met	Ala	Leu	Glu
				340					345					350		
P	ro	Trp		His	Tyr	Val	Pro		Lys	Arg	Asn	Leu		Asp	Leu	Leu
			355					360				_	365		_	
G	lu		Val	Lys	Trp	Ala		Ser	Phe	Thr	Leu		Pro	Arg	Leu	Glu
		370				_	375				_	380		_		_
		Ser	Gly	Thr	Ile		Thr	His	Cys	Asn		Cys	Leu	Pro	Gly	
	85				_	390			_		395					400
A	rσ	Asn	Phe	Val	Pro	Gln	Pro	Pro	Glu							

405

<210> 3384

<211> 154

<212> PRT

<213> Homo sapiens

<400> 3384

Met Arg Lys Pro Arg Glu Met Arg Gly Leu Ala Gln Gly Arg Gly Val

1 5 10 15

His Ser Gln Leu Cys Leu Leu Leu Thr Gln Asn Lys Asp Leu Gly Thr

20 25 30

Pro Arg Gly Ser Trp Pro Ser Gly Met Asp Ser Trp His Leu Arg Ala

35 40 45

Ser Arg Leu Gln Pro Ser Gly Ser His Gly Cys Pro Lys Ser Ser Gly

50 . 55 . 60

Pro Leu Leu Gly Ser Trp Leu Gly Cys Leu Ala Leu Pro Asp Arg Arg

65 70 75 80

Leu Leu Gly Ser Cys Leu Leu Gly Asp Ala Ser Cys Arg Ser Trp Cys

85 90 95

Gly Gly Gly Gln Gly Gly Gly Phe Phe Leu Ser Leu Ser Leu Ser

100 105 110

Ser Thr Phe Ser Pro Leu Pro Arg Gly Asn Gly Ser Arg Ile Ser Phe

115 120 125

Lys Arg Met Leu Leu Tyr Phe Ala Ser Gly Trp Lys Val Ala Val Leu

130 135 140

Ala Pro Val Ser Cys Thr Trp Thr Pro Val

<210> 3385

<211> 141

<212> PRT

<213> Homo sapiens

<400> 3385

Met Val His Ala Cys Gln Val Ser Ser Glu Cys Ser Gly Cys Leu Arg

1 5 10 15

Gly Gly Glu Glu Gly Met Pro Trp Leu Leu Pro Pro Leu Cys His His

20 25 30

Leu Pro Ala His Leu Gly Leu Lys Ser Val Trp Thr Ala Glu Ser Val

35 40 45

Ser Glu Lys Pro Val Leu Gly Gln Glu Leu Gly Asn Arg Ala Val Lys

50 55 60

Glu Val Gln Ser Gly Glu Glu Arg Arg Lys Leu Asp Leu Gly Thr Asp

65 70 75 80

Arg Ile Pro Gln Ala Cys Ser Thr Ser Gln Pro Leu Tyr Ala Pro Thr

85 90 95

Leu Gly Leu Trp Thr Gly Phe Met Phe Cys Leu Ile Ser Val Pro Glu

100 105 110

Ala Glu Met Gly Met Val Glu Arg Ser Ser Thr Gln Val Ala Pro Gly

115 120 125

Met Gly Met Ser Thr Pro Tyr Ser Pro Cys Val Ser Ser

130 135 140

<210> 3386

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3386

Met Val Glu Leu Ala Lys Tyr Ala Lys Gln His Val Pro Glu Gln His

1 5 10 15

Pro Lys Asp Lys Pro Ser Phe Val Arg Ala Arg Val Lys Lys Leu Leu 25 30

Ala Ala Gly Val Val Ser Ala Met Val Cys Met Val Lys Thr Glu Ser

35 40 45

Pro Val Leu Thr Ser Ser Cys Arg Glu Leu Leu Ser Arg Val Phe Leu 50 55 60

Ala Leu Val Glu Glu Val Glu Asp Arg Gly Thr Val Val Ala Gln Gly
65 70 75 80

Gly Gly Arg Ala Leu Ile Pro Leu Ala Leu Glu Gly Thr Asp Val Gly

85 90 95

Gln Thr Lys Ala Ala Gln Ala Leu Ala Lys Leu Thr Ile Thr Ser Asn 100 105 110

Pro Glu Met Thr Phe Pro Gly Glu Arg Ile Tyr Glu Val Arg Pro
115 120 125

Leu Val Ser Leu Leu His Leu Asn Cys Ser Gly Leu Gln Asn Phe Glu
130 135 140

Ala Leu Met Ala Leu Thr Asn Leu Ala Gly Ile Ser Glu Arg Leu Arg 145 150 155 160

Gln Lys Ile Leu Lys Glu Lys Ala Val Pro Met Ile Glu Gly Tyr Met 165 170 175

Phe Glu Glu His Glu Met Ile Arg Arg Ala Ala Thr Glu Cys Met Cys 180 185 190 Asn Leu Ala Met Ser Lys Glu Val Gln Asp Leu Phe Glu Ala Gln Gly Asn Asp Arg Leu Lys Leu Leu Val Leu Tyr Ser Gly Glu Asp Asp Glu Leu Leu Gln Arg Ala Ala Ala Gly Gly Leu Ala Met Leu Thr Ser Met Arg Pro Thr Leu Cys Ser Arg Ile Pro Gln Val Thr Thr His Trp Leu Glu Ile Leu Gln Ala Leu Leu Leu Ser Ser Asn Gln Glu Leu Gln His Arg Gly Ala Val Val Leu Asn Met Val Glu Ala Ser Arg Glu Ile Ala Ser Thr Leu Met Glu Ser Glu Met Met Glu Ile Leu Ser Val Leu Ala Lys Gly Asp His Ser Pro Val Thr Arg Ala Ala Ala Cys Leu Asp Lys Ala Val Glu Tyr Gly Leu Ile Gln Pro Asn Gln Asp Gly Glu

<210> 3387

<211> 1088

<212> PRT

<213> Homo sapiens

<400> 3387

Met Ala Asn Gly Thr Ala Asp Val Arg Lys Leu Phe Ile Phe Thr Thr

1 5 10 15

Thr Gln Asn Tyr Phe Gly Leu Met Ser Glu Leu Trp Asp Gln Pro Leu

			20					25					30		
Leu	Cys	Asn	Cys	Leu	Glu	Ile	Asn	Asn	Phe	Leu	Asp	Asp	Gly	Asn	Gln
		35					40					45			
Met	Leu	Leu	Arg	Val	Gln	Arg	Ser	Asp	Ala	Gly	Ile	Ser	Phe	Ser	Asn
	50					55					60				
Thr	Ile	Glu	Phe	Gly	Asp	Thr	Lys	Asp	Lys	Val	Leu	Val	Phe	Phe	Lys
65					70					75					80
Leu	Arg	Pro	Glu	Val	Ile	Thr	Asp	Glu	Asn	Leu	His	Asp	Asn	Ile	Leu
				85					90					95	
Val	Ser	Ser	Met	Leu	Glu	Ser	Pro	Ile	Ser	Ser	Leu	Tyr	Gln	Ala	Val
			100					105					110		
Arg	Gln	Val	Phe	Ala	Pro	Met	Leu	Leu	Lys	Asp	Gln	Glu	Trp	Ser	Arg
		115					120					125			
Asn	Phe	Asp	Pro	Lys	Leu	Gln	Asn	Leu	Leu	Ser	Glu	Leu	Glu	Ala	Gly
	130					135					140				
Leu	Gly	Ile	Val	Leu	Arg	Arg	Ser	Asp	Thr	Asn	Leu	Thr	Lys	Leu	Lys
145					150					155					160
Phe	Lys	Glu	Asp	Asp	Thr	Arg	Gly	Ile	Leu	Thr	Pro	Ser	Asp	Glu	Phe
				165					170					175	
Gln	Phe	Trp	Ile	Glu	Gln	Ala	His	Arg	Gly	Asn	Lys	Gln	Ile	Ser	Lys
			180					185					190		
Glu	Arg	Ala	Asn	Tyr	Phe	Lys	Glu	Leu	Phe	Glu	Thr	Ile	Ala	Arg	Glu
		195					200					205			
Phe	Tyr	Asn	Leu	Asp	Ser	Leu	Ser	Leu	Leu	Glu	Val	Val	Asp	Leu	Val
	210					215					220				
Glu	Thr	Thr	Gln	Asp	Val	Val	Asp	Asp	Val	Trp	Arg	Gln	Thr	Glu	His
225			·		230					235					240
Asp	His	Tyr	Pro	Glu	Ser	Arg	Met	Leu	His	Leu	Leu	Asp	Ile	Ile	Gly
				245					250					255	

Gly	Ser	Phe	Gly	Arg	Phe	Val	Gln	Lys	Lys	Leu	Gly	Thr	Leu	Asn	Leu
			260					265					270		
Trp	Glu	Asp	Pro	Tyr	Tyr	Leu	Val	Lys	Glu	Ser	Leu	Lys	Ala	Gly	Ile
		275					280					285			
Ser	Ile	Cys	Glu	Gln	Trp	Val	Ile	Val	Cys	Asn	His	Leu	Thr	Gly	Gln
	290					295					300				
Val	Trp	Gln	Arg	Tyr	Val	Pro	His	Pro	Trp	Lys	Asn	Glu	Lys	Tyr	Phe
305					310					315					320
Pro	Glu	Thr	Leu	Asp	Lys	Leu	Gly	Lys	Arg	Leu	Glu	Glu	Val	Leu	Ala
				325					330					335	
Ile	Arg	Thr	Ile	His	Glu	Lys	Phe	Leu	Tyr	Phe	Leu	Pro	Ala	Ser	Glu
			340					345					350		
Glu	Lys	Ile	Ile	Cys	Leu	Thr	Arg	Val	Phe	Glu	Pro	Phe	Thr	Gly	Leu
		355					360					365			
Asn	Pro	Val	Gln	Tyr	Asn	Pro	Tyr	Thr	Glu	Pro	Leu	Trp	Lys	Ala	Ala
	370					375					380				
Val	Ser	Gln	Tyr	Glu	Lys	Ile	Ile	Ala	Pro	Ala	Glu	Gln	Lys	Ile	Ala
385					390					395					400
Gly	Lys	Leu	Lys	Asn	Tyr	Ile	Ser	Glu	Ile	Gln	Asp	Ser	Pro	Gln	Gln
		•		405					410					415	
Leu	Leu	Gln	Ala	Phe	Leu	Lys	Tyr	Lys	Glu	Leu	Val	Lys	Arg	Pro	Thr
			420					425					430		
Ile	Ser	Lys	Glu	Leu	Met	Leu	Glu	Arg	Glu	Thr	Leu	Leu	Ala	Arg	Leu
		435					440					445			
Val	Asp	Ser	Ile	Lys	Asp	Phe	Arg	Leu	Asp	Phe	Glu	Asn	Arg	Cys	Arg
	450					455					460				
Gly	Ile	Pro	Gly	Asp	Ala	Ser	Gly	Pro	Leu	Ser	Gly	Lys	Asn	Leu	Ser
465					470					475					480
Glu	Val	Val	Asn	Ser	Ile	Val	Trp	Val	Arg	Gln	Leu	Glu	Leu	Lys	Val

				485					490					495	
Asp	Asp	Thr	Ile	Lys	Ile	Ala	Glu	Ala	Leu	Leu	Ser	Asp	Leu	Pro	Gly
			500					505					510		
Phe	Arg	Cys	Phe	His	Gln	Ser	Ala	Lys	Asp	Leu	Leu	Asp	Gln	Leu	Lys
		515					520					525			
Leu	Tyr	Glu	Gln	Glu	Gln	Phe	Asp	Asp	Trp	Ser	Arg	Asp	Ile	Gln	Ser
	530					535					540				
Gly	Leu	Ser	Asp	Ser	Arg	Ser	Gly	Leu	Cys	Ile	Glu	Ala	Ser	Ser	Arg
545					550					555					560
Ile	Met	Glu	Leu	Asp	Ser	Asn	Asp	Gly	Leu	Leu	Lys	Val	His	Tyr	Ser
				565					570					575	
Asp	Arg	Leu	Val	Ile	Leu	Leu	Arg	Glu	Val	Arg	Gln	Leu	Ser	Ala	Leu
			580					585					590		
Gly	Phe	Val	Ile	Pro	Ala	Lys	Ile	Gln	Gln	Val	Ala	Asn	Ile	Ala	Gln
		595					600					605			
Lys	Phe	Cys	Lys	Gln	Ala	Ile	Ile	Leu	Lys	Gln	Val	Ala	His	Phe	Tyr
	610					615					620				
Asn	Ser	Ile	Asp	Gln	Gln	Met	Ile	Gln	Ser	Gln	Arg	Pro	Met	Met	Leu
625					630					635					640
Gln	Ser	Ala	Leu	Ala	Phe	Glu	Gln	Ile	Ile	Lys	Asn	Ser	Lys	Ala	Gly
				645					650					655	
Ser	Gly	Gly	Lys	Ser	Gln	Ile	Thr	Trp	Asp	Asn	Pro	Lys	Glu	Leu	Glu
			660					665					670		
Gly	Tyr	Ile	Gln	Lys	Leu	Gln	Asn	Ala	Ala	Glu	Arg	Leu	Ala	Thr	Glu
		675					680					685			
Asn	Arg	Lys	Leu	Arg	Lys	Trp	His	Thr	Thr	Phe	Cys	Glu	Lys	Val	Val
	690					695					700				
Val	Leu	Met	Asn	Ile	Asp	Leu	Leu	Arg	Gln	Gln	Gln	Arg	Trp	Lys	Asp
705					710					715					720

Gly	Leu	Gln	Glu	Leu	Arg	Thr	Gly	Leu	Ala	Thr	Val	Glu	Ala	Gln	Gly
				725					730					735	
Phe	Gln	Ala	Ser	Asp	Met	His	Ala	Trp	Lys	Gln	His	Trp	Asn	His	Gln
			740					745					750		
Leu	Tyr	Lys	Ala	Leu	Glu	His	Gln	Tyr	Gln	Met	Gly	Leu	Glu	Ala	Leu
		755					760					765			
Asn	Glu	Asn	Leu	Pro	Glu	Ile	Asn	Ile	Asp	Leu	Thr	Tyr	Lys	Gln	Gly
	770	•				775					780				
Arg	Leu	Gln	Phe	Arg	Pro	Pro	Phe	Glu	Glu	Ile	Arg	Ala	Lys	Tyr	Tyr
785					790					795					800
Arg	Glu	Met	Lys	Arg	Phe	Ile	Gly	Ile	Pro	Asn	Gln	Phe	Lys	Gly	Val
				805					810					815	
Gly	Glu	Ala	Gly	Asp	Glu	Ser	Ile	Phe	Ser	Ile	Met	Ile	Asp	Arg	Asn
			820					825					830		
Ala	Ser	Gly	Phe	Leu	Thr	Ile	Phe	Ser	Lys	Ala	Glu	Asp	Leu	Phe	Arg
		835					840					845			
Arg	Leu	Ser	Ala	Val	Leu	His	Gln	His	Lys	Glu	Trp	Ile	Val	Ile	Gly
	850					855					860				
Gln	Val	Asp	Met	Glu	Ala	Leu	Val	Glu	Lys	His	Leu	Phe	Thr	Val	His
865					870					875					880
Asp	Trp	Glu	Lys	Asn	Phe	Lys	Ala	Leu	Lys	Ile	Lys	Gly	Lys	Glu	Val
				885					890					895	
Glu	Arg	Leu	Pro	Ser	Ala	Val	Lys	Val	Asp	Cys	Leu	Asn	Ile	Asn	Cys
			900					905					910		
Asn	Pro	Val	Lys	Thr	Val	Ile	Asp	Asp	Leu	Ile	Gln	Lys	Leu	Phe	Asp
		915					920					925			
Leu	Leu	Val	Leu	Ser	Leu	Lys	Lys	Ser	Ile	Gln	Ala	His	Leu	His	Glu
	930					935					940				
Tle	Asn	Thr	Phe	Val	Thr	Glu	Ala	Met	Glu	Val	Len	Thr	Tle	Met	Pro

Gln Ser Val Glu Glu Ile Gly Asp Ala Asn Leu Gln Tyr Ser Lys Leu Gln Glu Arg Lys Pro Glu Ile Leu Pro Leu Phe Gln Glu Ala Glu Asp Lys Asn Arg Leu Leu Arg Thr Val Ala Gly Gly Leu Glu Thr Ile Ser Asn Leu Lys Ala Lys Trp Asp Lys Phe Glu Leu Met Met Glu Ser His Gln Leu Met Ile Lys Asp Gln Ile Glu Val Met Lys Gly Asn Val Lys Ser Arg Leu Gln Ile Tyr Tyr Gln Glu Leu Glu Lys Phe Lys Ala Arg Trp Asp Gln Leu Lys Pro Gly Asp Asp Val Ile Glu Thr Gly Gln His Asn Thr Leu Asp Lys Ser Ala Lys Leu Ile Lys Glu Lys Lys Ile

<210> 3388

<211> 352

<212> PRT

<213> Homo sapiens

<400> 3388

Met Leu Leu Pro Asp Asp Phe Lys Ala Ser Ser Lys Ile Lys Val Asn

1 5 10 15

Asn His Leu Phe His Arg Glu Asn Leu Pro Ser His Phe Lys Phe Lys

20 25 30

Glu	Tyr	Cys	Pro	Gln	Val	Phe	Arg	Asn	Leu	Arg	Asp	Arg	Phe	Gly	He
		35					40					45			
Asp	Asp	Gln	Asp	Tyr	Leu	Val	Thr	Leu	Thr	Arg	Asn	Pro	Pro	Ser	Glu
	50					55					60				
Ser	Glu	Gly	Ser	Asp	Gly	Arg	Phe	Leu	Ile	Ser	Tyr	Asp	Arg	Thr	Leu
65					70					75					80
Val	Ile	Lys	Glu	Val	Ser	Ser	Glu	Asp	Ile	Ala	Asp	Met	His	Ser	Asn
				85					90					95	
Leu	Ser	Asn	Tyr	His	Gln	Tyr	Ile	Val	Lys	Cys	His	Gly	Asn	Thr	Leu
			100					105					110		
Leu	Pro	Gln	Phe	Leu	Gly	Met	Tyr	Arg	Val	Ser	Val	Asp	Asn	Glu	Asp
		115					120					125			
Ser	Tyr	Met	Leu	Val	Met	Arg	Asn	Met	Phe	Ser	His	Arg	Leu	Pro	Val
	130					135					140				
His	Arg	Lys	Tyr	Asp	Leu	Lys	Gly	Ser	Leu	Val	Ser	Arg	Glu	Ala	Ser
145					150					155					160
Asp	Lys	Glu	Lys	Val	Lys	Glu	Leu	Pro	Thr	Leu	Lys	Asp	Met	Asp	Phe
				165					170					175	
Leu	Asn	Lys	Asn	Gln	Lys	Val	Tyr	Ile	Gly	Glu	Glu	Glu	Lys	Lys	Ile
			180					185					190		
Phe	Leu	Glu	Lys	Leu	Lys	Arg	Asp	Val	Glu	Phe	Leu	Val	Gln	Leu	Lys
		195					200					205			
Ile	Met	Asp	Tyr	Ser	Leu	Leu	Leu	Gly	Ile	His	Asp	Ile	Ile	Arg	Gly
	210					215					220				
Ser	Glu	Pro	Glu	Glu	Glu	Ala	Pro	Val	Arg	Glu	Asp	Glu	Ser	Glu	Val
225					230					235					240
Asp	Gly	Asp	Cys	Ser	Leu	Thr	Gly	Pro	Pro	Ala	Leu	Val	Gly	Ser	Tyr
				245					250					255	
Glv	Thr	Ser	Pro	Glu	Glv	Ile	Glv	Glv	Tvr	Ile	His	Ser	His	Arg	Pro

260 265 270

Leu Gly Pro Gly Glu Phe Glu Ser Phe Ile Asp Val Tyr Ala Ile Arg

Ser Ala Glu Gly Ala Pro Gln Lys Glu Val Tyr Phe Met Gly Leu Ile

280

290 295 300

Asp Ile Leu Thr Gln Tyr Asp Ala Lys Lys Ala Ala His Ala Ala

305 310 315 320

Lys Thr Val Lys His Gly Ala Gly Ala Glu Ile Ser Thr Val His Pro

325 330 335

285

Glu Gln Tyr Ala Lys Arg Phe Leu Asp Phe Ile Thr Asn Ile Phe Ala

340 345 350

<210> 3389

<211> 152

<212> PRT

<213> Homo sapiens

275

<400> 3389

Met Gln Pro Arg Ser Arg Trp Gln Ala Gln Asn Ser Glu Thr Lys Ser

1 5 10 15

His Gly Ala Lys Val Arg His Ala Phe Leu Ala His Leu Cys Val Lys

20 25 30

Lys Val Thr Gly Met Leu Thr Thr Gln Val Leu Gly Val Arg Pro Gly

35 40 45

Gln Arg Arg Gly Pro Cys Cys Ser Arg Ile Asp Arg Gln Leu Ala Ser

50 55 60

Lys Leu Gly Ala Gln Arg Gln Arg Leu Pro Ile His Leu Ser Thr Leu

65 70 75 80

Leu Ser His Leu Phe Pro Lys Asp Pro Lys Ala Leu His Ser Ile 95 90 85 Phe Gln Arg Asp Met Gly Val Glu Gly Met Glu Val Leu Ser His Leu 105 110 100 Leu Leu Leu His Leu Glu Ala Pro Arg Ser Thr Asp Thr Asp His Pro 120 125 115 Leu Ser Val Lys Asn Val Leu Phe Gln Glu Ala Pro Gln Leu Arg Leu 130 135 140

Lys Glu Thr Ala Pro Pro Pro Gly
145 150

<210> 3390

<211> 129

<212> PRT

<213> Homo sapiens

<400> 3390

Met Ala Cys Pro Ser Pro Val Ser Arg Arg Leu Ala Arg Ser Thr Leu

1 5 10 15

Leu Leu Ile Pro Leu Phe Gly Val His Tyr Ile Met Phe Ala Phe Phe
20 25 30

Pro Asp Asn Phe Lys Pro Glu Val Lys Met Val Phe Glu Leu Val Val
35 40 45

Gly Ser Phe Gln Gly Phe Val Val Ala IIe Leu Tyr Cys Phe Leu Asn
50 55 60

Gly Glu Val Gln Ala Glu Leu Arg Arg Lys Trp Arg Arg Trp His Leu
65 70 75 80

Gln Gly Val Leu Gly Trp Asn Pro Lys Tyr Arg His Pro Ser Gly Gly

Ser Asn Gly Ala Thr Cys Ser Thr Gln Val Ser Met Leu Thr Arg Val
100 105 110

Ser Pro Gly Ala Arg Arg Ser Ser Ser Phe Gln Ala Glu Val Ser Leu

115 120 125

Val

<210> 3391

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3391

Met Gly Met Lys Arg Glu His Phe Cys Tyr Leu Pro Asn Ser Trp Glu

1 5 10 15

Pro Val Asp Ser Leu His Pro His Ala Pro Gly Leu Ala Ala Thr Gly
20 25 30

Leu Val Cys Val Ser Ser Met Cys Leu Phe Trp His Ile Ser Lys Val
35 40 45

Arg Tyr Ala Val Cys Gly Leu Val Ser Leu Ala Pro Phe Ala Glu His
50 55 60

Asn Val Phe Glu Val His Pro Phe Arg Ser Phe Glu Gly Cys Val Ala
65 70 75 80

Phe His Gly Val Ala Ile His Ser Cys Ala Tyr Gly Arg Leu Asp Cys
85 90 95

Val Gln Phe Leu Ala Thr Leu Asn Lys Ala Ser Val Asn Met Asp Ser

100 105 110

Leu Val Leu Glu Arg Met Tyr Val Leu Ser Leu Leu Cys Arg Cys Leu
115 120 125

Gly Val Asp Cys Trp Val Met Trp 130 135

<210> 3392

<211> 235

<212> PRT

<213> Homo sapiens

<400> 3392

Met Arg Pro Leu Ala Gly Gly Leu Leu Lys Val Val Phe Val Val Phe

1 5 10 15

Ala Ser Leu Cys Ala Trp Tyr Ser Gly Tyr Leu Leu Ala Glu Leu Ile 20 25 30

Pro Asp Ala Pro Leu Ser Ser Ala Ala Tyr Ser Ile Arg Ser Ile Gly
35 40 45

Glu Arg Pro Val Leu Lys Ala Pro Val Pro Lys Arg Gln Lys Cys Asp
50 55 60

His Trp Thr Pro Cys Pro Ser Asp Thr Tyr Ala Tyr Arg Leu Leu Ser
65 70 75 80

Gly Gly Gly Arg Ser Lys Tyr Ala Lys Ile Cys Phe Glu Asp Asn Leu

85

90

95

Leu Met Gly Glu Gln Leu Gly Asn Val Ala Arg Gly Ile Asn Ile Ala 100 105 110

Ile Val Asn Tyr Val Thr Gly Asn Val Thr Ala Thr Arg Cys Phe Asp 115 120 125

Met Tyr Glu Gly Asp Asn Ser Gly Pro Met Thr Lys Phe Ile Gln Ser

Ala Ala Pro Lys Ser Leu Leu Phe Met Val Thr Tyr Asp Asp Gly Ser Thr Arg Leu Asn Asn Asp Ala Lys Asn Ala Ile Glu Ala Leu Gly Ser Lys Glu Ile Arg Asn Met Lys Phe Arg Ser Ser Trp Val Phe Ile Ala Ala Lys Gly Leu Glu Leu Pro Ser Glu Ile Gln Arg Glu Lys Ile Asn His Ser Asp Ala Lys Asn Asn Arg Tyr Ser Gly Trp Pro Ala Glu Ile Gln Ile Glu Gly Cys Ile Pro Lys Glu Arg Ser

<210> 3393

<211> 118

<212> PRT

<213> Homo sapiens

<400> 3393

Met Cys Ala Gln Asn Tyr Val Val Leu Leu Asp Ser Thr Leu Pro Arg

1 5 10 15

Ser Gln Tyr Asp Tyr Ile Leu Pro Gln Val Ser Phe Thr Ala Val Gly
20 25 30

Tyr His Lys His Ile Thr Leu Ile Phe Asn Pro Thr Arg Lys Leu Pro
35 40 45

Glu Gln Asp Ile Ala Gln Gly Ser Tyr Ile Ala Leu Pro Leu Thr Leu

Leu Val Leu Leu Ala Gly Tyr Asn His Asp Lys Leu Ile Pro Leu Leu Leu Gln Leu Thr Ser Arg Leu Gln Gly Val Arg Ala Leu Gly Gln Ala Ala Ser Asp Asn Ser Gly Pro Glu Asp Ala Lys Arg Gln Ala Lys Lys Gln Lys Thr Arg Arg Thr <210> 3394 <211> 548 <212> PRT <213> Homo sapiens <400> 3394 Met His Arg Leu Lys Cys Met Val Lys Ala Phe Phe Leu Thr Phe Cys Gln Val Ser Ser Glu Asp Arg Ser Ala Leu Trp Ala Leu Val Thr Phe Tyr Gly Gly Asp Cys Gln Leu Thr Leu Asn Lys Lys Cys Thr His Leu Ile Val Pro Glu Pro Lys Gly Glu Lys Tyr Glu Cys Ala Leu Lys Arg Ala Ser Ile Lys Ile Val Thr Pro Asp Trp Val Leu Asp Cys Val Ser Glu Lys Thr Lys Lys Asp Glu Ala Phe Tyr His Pro Arg Leu Ile Ile

			100					105					110		
Glu	Glu	Gln	Asp	Ser	Gln	Asn	Glu	Gly	Ser	Thr	Asp	Glu	Lys	Ser	Ser
		115					120					125			
Pro	Ala	Ser	Ser	Gln	Glu	Gly	Ser	Pro	Ser	Gly	Asp	Gln	Gln	Phe	Ser
	130					135					140				
Pro	Lys	Ser	Asn	Thr	Glu	Lys	Ser	Lys	Gly	Glu	Leu	Met	Phe	Asp	Asp
145					150					155					160
Ser	Ser	Asp	Ser	Ser	Pro	Glu	Lys	Gln	Glu	Arg	Asn	Leu	Asn	Trp	Thr
				165					170					175	
Pro	Ala	Glu	Val	Pro	Gln	Leu	Ala	Ala	Ala	Lys	Arg	Arg	Leu	Pro	Gln
			180					185				•	190		
Gly	Lys	Glu	Pro	Gly	Leu	Ile	Asn	Leu	Cys	Ala	Asn	Val	Pro	Pro	Val
		195					200					205			
Pro	Gly	Asn	Ile	Leu	Pro	Pro	Glu	Val	Arg	Gly	Asn	Leu	Met	Ala	Ala
	210					215					220				
Gly	Gln	Asn	Leu	Gln	Ser	Ser	Glu	Arg	Ser	Glu	Met	Ile	Ala	Thr	Trp
225					230					235					240
Ser	Pro	Ala	Val	Arg	Thr	Leu	Arg	Asn	Ile	Thr	Asn	Asn	Ala	Asp	Ile
				245					250					255	
Gln	Gln	Met	Asn	Arg	Pro	Ser	Asn	Val	Ala	His	Ile	Leu	Gln	Thr	Leu
			260					265					270		
Ser	Ala	Pro	Thr	Lys	Asn	Leu	Glu	Gln	Gln	Val	Asn	His	Ser	Gln	Gln
		275					280					285			
Gly	His	Thr	Asn	Ala	Asn	Ala	Val	Leu	Phe	Ser	Gln	Val	Lys	Val	Thr
	290					295					300				
Pro	Glu	Thr	His	Met	Leu	Gln	Gln	Gln	Gln	Gln	Ala	Gln	Gln	Gln	Gln
305					310					315					320
Gln	Gln	His	Pro	Val	Leu	His	Leu	Gln	Pro	Gln	Gln	Ile	Met	Gln	Leu
				325					330					335	

Gln	Ile	Ser	Gln	Gln	Pro	Tyr	Pro	Gln	Gln						
			340					345					350		
Pro	Pro	His	Pro	Phe	Ser	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Ala	His
		355					360					365			
Pro	His	Gln	Phe	Ser	Gln	Gln	Gln	Leu	Gln	Phe	Pro	Gln	Gln	Gln	Leu
	370					375					380				
His	Pro	Pro	Gln	Gln	Leu	His	Arg	Pro	Gln	Gln	Gln	Leu	Gln	Pro	Phe
385					390					395					400
Gln	Gln	Gln	His	Ala	Leu	Gln	Gln	Gln	Phe	His	Gln	Leu	Gln	Gln	His
				405					410					415	
Gln	Leu	Gln	Gln	Gln	Gln	Leu	Ala	Gln	Leu	Gln	Gln	Gln	His	Ser	Leu
			420					425					430		
Leu	Gln	Ile	Gln	Gln	Gln	Gln	Leu	Gln	Arg						
		435					440					445			
Met	His	Gln	Met	Gln	Ser.	Gln	Thr	Ala	Pro						
	450					455					460				
His	Leu	Ser	Gln	Thr	Ser	Gln	Ala	Leu	Gln	His	Gln	Val	Pro	Pro	Gln
465					470					475					480
Gln	Pro	Pro	Gln	Pro	Pro	Pro	Ser	Pro	Gln						
				485					490					495	
Gln	His	Gln	Leu	Phe	Gly	His	Asp	Pro	Ala	Val	Glu	Ile	Pro	Glu	Glu
			500					505					510		
Gly	Phe	Leu	Leu	Gly	Cys	Val	Phe	Ala	Ile	Ala	Asp	Tyr	Pro	Glu	Gln
		515					520					525			
Met	Ser	Asp	Lys	Gln	Leu	Leu	Ala	Thr	Trp	Lys	Arg	Val	Arg	Leu	Cys
	530					535					540				
Leu	Glu	Glu	Gly												
545															

<210> 3395

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3395

Met Gly Ser Leu Met Ala Glu Met Val Val Lys Pro Thr Met Ser Leu

1 5 10 15

Lys Tyr Ser Val Thr Cys Ser Lys Tyr Ser Gly Ser Thr Gly Val Pro
20 25 30

Val Phe Lys Ala Ser Ala Thr Asp Leu Gly Met Ala Gly Ser Glu Val
35. 40 45

Thr Trp Gly Pro Leu Tyr Leu Ala Gly Leu Gln Leu Pro Ser Gln Pro 50 55 60

Thr Pro Ser His Trp His Pro Arg Gln His Leu Cys Lys Gln Pro 65 70 75 80

Val Cys Leu Leu Phe Gln Leu Gln Leu Leu Arg Ala Leu Pro Asp 85 90 95

Gln Ile Leu Gln Val Thr Arg Val Leu Leu Gln His Pro Lys His Arg
100 105 110

Val Asn Asp Val Arg Leu Pro Ala Leu Val Asp Val Leu Glu Leu Ala 115 120 125

Val Glu Gly Ser Trp

130

<210> 3396

<211> 548

<212> PRT

<213> Homo sapiens

<400> 3396

Met Gln Pro Gly Leu Ser Pro Gly Ser Pro Gly Asp Pro Arg Pro Pro

1 5 10 15

Thr Pro Glu Thr Asp Tyr Pro Glu Ser Leu Thr Ser Tyr Pro Glu Glu
20 25 30

Asp Tyr Ser Pro Val Gly Ser Phe Gly Glu Pro Gly Pro Thr Ser Pro

35 40 45

Leu Thr Thr Pro Pro Gly Trp Ser Cys His Val Ser Gln Asp Lys Gln
50 55 60

Met Leu Tyr Thr Asn His Phe Thr Gln Glu Gln Trp Val Arg Leu Glu 65 70 75 80

Asp Pro His Gly Lys Pro Tyr Phe Tyr Asn Pro Glu Asp Ser Ser Val
85 90 95

Arg Trp Glu Leu Pro Gln Val Pro Val Pro Ala Pro Arg Ser Ile His
100 105 110

Lys Ser Ser Gln Asp Gly Asp Thr Pro Ala Gln Ala Ser Pro Pro Glu
115 120 125

Glu Lys Val Pro Ala Glu Leu Asp Glu Val Gly Ser Trp Glu Glu Val
130 135 140

Ser Pro Ala Thr Ala Ala Val Arg Thr Lys Thr Leu Asp Lys Ala Gly
145 150 155 160

Val Leu His Arg Thr Lys Thr Ala Asp Lys Gly Lys Arg Leu Arg Lys

165 170 175

Lys His Trp Ser Ala Ser Trp Thr Val Leu Glu Gly Gly Val Leu Thr
180 185 190

Phe Phe Lys Asp Ser Lys Thr Ser Ala Ala Gly Gly Leu Arg Gln Pro

		195					200					205			
Ser	Lys	Phe	Ser	Thr	Pro	Glu	Tyr	Thr	Val	Glu	Leu	Arg	Gly	Ala	Thr
	210					215					220				
Leu	Ser	Trp	Ala	Pro	Lys	Asp	Lys	Ser	Ser	Arg	Lys	Asn	Val	Leu	Glu
225					230					235					240
Leu	Arg	Ser	Arg	Asp	Gly	Ser	Glu	Tyr	Leu	Ile	Gln	His	Asp	Ser	Glu
				245					250					255	
Ala	Ile	Ile	Ser	Thr	Trp	His	Lys	Ala	Ile	Ala	Gln	Gly	Ile	Gln	Glu
			260					265					270		
Leu	Ser	Ala	Glu	Leu	Pro	Pro	Glu	Glu	Ser	Glu	Ser	Ser	Arg	Val	Asp
		275					280					285			
Phe	Gly	Ser	Ser	Glu	Arg	Leu	Gly	Ser	Trp	Gln	Glu	Lys	Glu	Glu	Asp
	290					295					300				
Ala	Arg	Pro	Asn	Ala	Ala	Ala	Pro	Ala	Leu	Gly	Pro	Val	Gly	Leu	Glu
305					310					315					320
Ser	Asp	Leu	Ser	Lys	Val	Arg	His	Lys	Leu	Arg	Lys	Phe	Leu	Gln	Arg
				325					330					335	
Arg	Pro	Thr	Leu	Gln	Ser	Leu	Arg	Glu	Lys	Gly	Tyr	Ile	Lys	Asp	Gln
			340					345					350		
Val	Phe	Gly	Cys	Ala	Leu	Ala	Ala	Leu	Cys	Glu	Arg	Glu	Arg	Ser	Arg
		355					360					365			
Val	Pro	Arg	Phe	Val	Gln	Gln	Cys	Ile	Arg	Ala	Val	Glu	Ala	Arg	Gly
	370					375					380				
Leu	Asp	Ile	Asp	Gly	Leu	Tyr	Arg	Ile	Ser	Gly	Asn	Leu	Ala	Thr	Ile
385					390					395					400
Gln	Lys	Leu	Arg	Tyr	Lys	Val	Asp	His	Asp	Glu	Arg	Leu	Asp	Leu	Asp
				405					410					415	
Asp	Gly	Arg	Trp	Glu	Asp	Val	His	Val	Ile	Thr	Gly	Ala	Leu	Lys	Leu
			420					425					430		

Phe Phe Arg Glu Leu Pro Glu Pro Leu Phe Pro Phe Ser His Phe Arg Gln Phe Ile Ala Ala Ile Lys Leu Gln Asp Gln Ala Arg Arg Ser Arg Cys Val Arg Asp Leu Val Arg Ser Leu Pro Ala Pro Asn His Asp Thr Leu Arg Met Leu Phe Gln His Leu Cys Arg Val Ile Glu His Gly Glu Gln Asn Arg Met Ser Val Gln Ser Val Ala Ile Val Phe Gly Pro Thr Leu Leu Arg Pro Glu Val Glu Glu Thr Ser Met Pro Met Thr Met Val Phe Gln Asn Gln Val Val Glu Leu Ile Leu Gln Gln Cys Ala Asp Ile Phe Pro Pro His <210> 3397 <211> 118 <212> PRT <213> Homo sapiens <400> 3397 Met Met Asp Ala Ser Lys Glu Leu Gln Val Leu His Ile Asp Phe Leu

Asn Gln Asp Asn Ala Val Ser His His Thr Trp Glu Phe Gln Thr Ser

Ser Pro Val Phe Arg Arg Gly Gln Val Phe His Leu Arg Leu Val Leu

Asn Gln Pro Leu Gln Ser Tyr His Gln Leu Lys Leu Glu Phe Ser Thr Gly Pro Asn Pro Ser Ile Ala Lys His Thr Leu Val Val Leu Asp Pro Arg Thr Pro Ser Asp His Tyr Asn Trp Gln Ala Thr Leu Gln Asn Glu Ser Gly Lys Glu Val Ser Thr His Trp Ala Gly Gly Trp Ala Gly Trp Leu Leu Ala Glu Cys Ser

<210> 3398

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3398

Met Pro Gly Ala Glu Met Trp Thr Glu Gly Asp Phe Ser Ala Ser Leu Ala Gly Ala Cys Ser Lys Leu Ala Asp Ala Leu Cys Ala Cys Trp Ala Arg Ser Pro Ser Ser Gly Glu Ala Leu Gly Leu Glu Gln Leu Gly Leu Ser Trp Leu Leu Thr Pro Glu Pro Gly Ser Leu Leu Val Leu His Tyr Leu Ala Thr Ser Ala Gln Gly Pro Asp Lys Arg Tyr Cys Leu Arg Ala Thr Glu Asp Thr Gly Ala Gln Ser Trp Thr Thr Gly Pro Gly Pro Gly Arg Thr Arg Arg Ser Arg Pro Ser Ala Ala Leu Trp Gly Arg Ser Pro Trp Gly Cys <210> 3399 <211> 102 <212> PRT <213> Homo sapiens <400> 3399 Met Leu Gln Phe Pro Gly Phe Leu Val Leu Ile Ile Pro Pro Arg Ser Cys Leu Leu Gln Arg Ser Thr Val Gln Gln Glu Ala Glu Pro Met Pro Leu Arg Gly Trp Arg Tyr Cys Ile Leu Pro Lys Ile Pro Ala Ser His Ser Asn Asn Glu Pro Asn Ser Ala Glu Glu Leu Trp Ala Val Val Ser Lys Thr Gln Ala Tyr Ser Leu Pro Pro Leu Pro Phe Leu Phe Arg Pro Val Leu Thr Lys Arg Ile Leu Ala Leu Gln Ile Val Leu Tyr Phe Asp

Ala Phe Arg Ile Asn Ile

<210> 3400

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3400

Met Glu Val Val Val IIe His Ser Ser Pro Met Ser Arg Arg Tyr

1 5 10 15

Ser Phe Leu His Leu Trp Glu Cys Gly Ser Gly Trp Leu Pro Val Asp 20 25 30

Ser Pro Pro Arg Thr Gly Leu Gly His Arg Cys Cys Leu Ala Gln Gly
35 40 45

His Val Pro Ser Pro Arg Ser Ser His Thr Lys Trp Leu Ser Cys Val
50 55 60

His Gln Gly Ser Thr Thr Leu Gly Ala Thr Thr Ala Pro Gly Leu Pro 65 70 75 80

Val Gly Trp Leu Gly Pro Leu Leu Cys Met His His Ser Pro Thr Ser

85 90 95

Leu Gly Pro Ile Leu Lys Ala Val Leu His Lys Ala Phe Thr Cys Asn 100 105 110

Leu Arg Ala Ser Glu Ser Val Pro Trp Gly Ser
115 120

<210> 3401

<211> 443

<212> PRT

<213> Homo sapiens

<400> 3401 Met Gly Ser Pro Ala His Arg Pro Ala Leu Leu Leu Leu Pro Pro Leu Leu Leu Leu Leu Leu Arg Val Pro Pro Ser Arg Ser Phe Pro Asp Thr Pro Trp Cys Ser Pro Ile Lys Val Lys Tyr Gly Asp Val Tyr Cys Arg Ala Pro Gln Gly Gly Tyr Tyr Lys Thr Ala Leu Gly Thr Arg Cys Asp Ile Arg Cys Gln Lys Gly Tyr Glu Leu His Gly Ser Ser Leu Leu Ile Cys Gln Ser Asn Lys Arg Trp Ser Asp Lys Val Ile Cys Lys Gln Lys Arg Cys Pro Thr Leu Ala Met Pro Ala Asn Gly Gly Phe Lys Cys Val Asp Gly Ala Tyr Phe Asn Ser Arg Cys Glu Tyr Tyr Cys Ser Pro Gly Tyr Thr Leu Lys Gly Glu Arg Thr Val Thr Cys Met Asp Asn Lys Ala Trp Ser Gly Arg Pro Ala Ser Cys Val Asp Met Glu Pro Pro Arg Ile Lys Cys Pro Ser Val Lys Glu Arg Ile Ala Glu Pro Asn Lys Leu Thr Val Arg Val Ser Trp Glu Thr Pro Glu Gly Arg Asp Thr Ala Asp Gly Ile Leu Thr Asp Val Ile Leu Lys Gly Leu Pro Pro Gly Ser Asn

Phe Pro Glu Gly Asp His Lys Ile Gln Tyr Thr Val His Asp Arg Ala

	210					215					220				
Glu	Asn	Lys	Gly	Thr	Cys	Lys	Phe	Arg	Val	Lys	Val	Arg	Val	Lys	Arg
225					230					235					240
Cys	Gly	Lys	Leu	Asn	Ala	Pro	Glu	Asn	Gly	Tyr	Met	Lys	Cys	Ser	Ser
				245					250					255	
Asp	Gly	Asp	Asn	Tyr	Gly	Ala	Thr	Cys	Glu	Phe	Ser	Cys	Ile	Gly	Gly
			260					265					270		
Tyr	Glu	Leu	Gln	Gly	Ser	Pro	Ala	Arg	Val	Cys	Gln	Ser	Asn	Leu	Ala
		275					280					285			
Trp	Ser	Gly	Thr	Glu	Pro	Thr	Cys	Ala	Ala	Met	Asn	Val	Asn	Val	Gly
	290					295					300				
Val	Arg	Thr	Ala	Ala	Ala	Leu	Leu	Asp	Gln	Phe	Tyr	Glu	Lys	Arg	Arg
305					310					315					320
Leu	Leu	Ile	Val	Ser	Thr	Pro	Thr	Ala	Arg	Asn	Leu	Leu	Tyr	Arg	Leu
				325					330				٠	335	
Gln	Leu	Gly	Met	Leu	Gln	Gln	Ala	Gln	Cys	Gly	Leu	Asp	Leu	Arg	His
			340					345					350		
Ile	Thr	Val	Val	Glu	Leu	Val	Gly	Val	Phe	Pro	Thr	Leu	Ile	Gly	Arg
		355					360					365			
Ile	Gly	Ala	Lys	Ile	Met	Pro	Pro	Ala	Leu	Ala	Leu	Gln	Leu	Arg	Leu
	370					375					380				
Leu	Leu	Arg	Ile	Pro	Leu	Tyr	Ser	Phe	Ser	Met	Val	Leu	Val	Asp	Lys
385					390					395					400
His	Gly	Met	Asp	Lys	Glu	Arg	Tyr	Val	Ser	Leu	Val	Met	Pro	Val	Ala
				405					410					415	
Leu	Phe	Asn	Leu	Ile	Asp	Thr	Phe	Pro	Leu	Arg	Lys	Glu	Glu	Met	Val
			420					425					430		
Leu	Gln	Ala	Glu	Met	Ser	Gln	Thr	Cys	Asn	Thr					
		435					440								

<210> 3402 <211> 555 <212> PRT <213> Homo sapiens <400> 3402 Met Gly Lys Trp Arg Pro Gly Gln Gly His Thr Thr Gly Ser Val Lys Pro Leu Ser Arg Ser Asp Ala Met Glu Leu Asp Leu Ser Pro Pro His Leu Ser Ser Ser Pro Glu Asp Leu Cys Pro Ala Pro Gly Thr Pro Pro Gly Thr Pro Arg Pro Pro Asp Thr Pro Leu Pro Glu Glu Val Lys Arg Ser Gln Pro Leu Leu Ile Pro Thr Thr Gly Arg Lys Leu Arg Glu Glu Glu Arg Arg Ala Thr Ser Leu Pro Ser Ile Pro Asn Pro Phe Pro Glu Leu Cys Ser Pro Pro Ser Gln Ser Pro Ile Leu Gly Gly Pro Ser Ser Ala Arg Gly Leu Leu Pro Arg Asp Ala Ser Arg Pro His Val Val Lys

Val Tyr Ser Glu Asp Gly Ala Cys Arg Ser Val Glu Val Ala Thr Gly

Ala Thr Ala Arg His Val Cys Glu Met Leu Val Gln Arg Ala His Ala

Leu Ser Asp Glu Thr Trp Gly Leu Val Glu Cys His Pro His Leu Ala

					165					170					175	
	Leu	Glu	Arg	Gly	Leu	Glu	Asp	His	Glu	Ser	Val	Val	Glu	Val	Gln	Ala
				180					185					190		
	Ala	Trp	Pro	Val	Gly	Gly	Asp	Ser	Arg	Phe	Val	Phe	Arg	Lys	Asn	Phe
			195					200					205			
	Ala	Lys	Tyr	Glu	Leu	Phe	Lys	Ser	Ser	Pro	His	Ser	Leu	Phe	Pro	Glu
•		210					215					220				
	Lys	Met	Val	Ser	Ser	Cys	Leu	Asp	Ala	His	Thr	Gly	Ile	Ser	His	Glu
	225					230					235					240
	Asp	Leu	Ile	Gln	Asn	Phe	Leu	Asn	Ala	Gly	Ser	Phe	Pro	Glu	Ile	Gln
					245					250					255	
	Gly	Phe	Leu	Gln	Leu	Arg	Gly	Ser	Gly	Arg	Lys	Leu	Trp	Lys	Arg	Phe
				260					265					270		
	Phe	Cys	Phe	Leu	Arg	Arg	Ser	Gly	Leu	Tyr	Tyr	Ser	Thr	Lys	Gly	Thr
			275					280					285			
	Ser	Lys	Asp	Pro	Arg	His	Leu	Gln	Tyr	Val	Ala	Asp	Val	Asn	Glu	Ser
		290					295					300				
	Asn	Val	Tyr	Val	Val	Thr	Gln	Gly	Arg	Lys	Leu	Tyr	Gly	Met	Pro	Thr
	305					310					315					320
	Asp	Phe	Gly	Phe	Cys	Val	Lys	Pro	Asn	Lys	Leu	Arg	Asn	Gly	His	Lys
					325					330					335	
	Gly	Leu	Arg	Ile	Phe	Cys	Ser	Glu	Asp	Glu	Gln	Ser	Arg	Thr	Cys	Trp
				340					345					350		
	Leu	Ala	Ala	Phe	Arg	Leu	Phe	Lys	Tyr	Gly	Val	Gln	Leu	Tyr	Lys	Asn
			355					360					365			
	Tyr	Gln	Gln	Ala	Gln	Ser	Arg	His	Leu	His	Pro	Ser	Cys	Leu	Gly	Ser
		370					375					380				
	Pro	Pro	Leu	Arg	Ser	Ala	Ser	Asp	Asn	Thr	Leu	Val	Ala	Met	Asp	Phe
	385					390					395					400

Ser Gly His Ala Gly Arg Val Ile Glu Asn Pro Arg Glu Ala Leu Ser Val Ala Leu Glu Glu Ala Gln Ala Trp Arg Lys Lys Thr Asn His Arg Leu Ser Leu Pro Met Pro Ala Ser Gly Thr Ser Leu Ser Ala Ala Ile His Arg Thr Gln Leu Trp Phe His Gly Arg Ile Ser Arg Glu Glu Ser Gln Arg Leu Ile Gly Gln Gln Gly Leu Val Asp Gly Leu Phe Leu Val Arg Glu Ser Gln Arg Asn Pro Gln Gly Phe Val Leu Ser Leu Cys His Leu Gln Lys Val Lys His Tyr Leu Ile Leu Pro Ser Glu Glu Gly Arg Leu Tyr Phe Ser Met Asp Asp Gly Gln Thr Arg Phe Thr Asp Leu Leu Gln Leu Val Glu Phe His Gln Leu Asn Arg Gly Ile Leu Pro Cys Leu Leu Arg His Cys Cys Thr Arg Val Ala Leu

<210> 3403

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3403

Met Lys Ser Arg Leu Arg Arg Ser Gln Met Glu Met Arg Asp Leu Leu

5 10 15 1 Gly Pro Gly Val Lys Val Thr Phe Val Arg Thr Leu Trp Leu Glu Thr 30 20 25 Leu Cys Pro Cys Pro Arg Asn Leu Trp Asn Phe Glu Leu Glu Ser Glu 35 40 45 Asp Leu Gly Tyr Leu Ala Glu Glu Ile Ser Lys Gln Gln Ser Val Gln 60 50 55 Asp Val Ala Trp Leu Leu Leu Val Val Cys Ala His Ile Cys Glu Gln 70 75 80 65 Arg His Asp Lys Lys Leu Glu Leu Ile Phe Lys Lys Glu Ala Glu Cys 85 90 95 Lys Ser Leu Glu Asn Leu Gln Pro Gly His Val Val Glu Lys Lys 100 105 110 Asn His Phe Leu Glu Arg Asn Ser Ser 115 120

<210> 3404

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3404

Met Pro Leu His Thr Leu Leu Ile Phe Pro Val Met Ser Ser Gly Ala
1 5 10 15

Leu Leu Leu Ala Val Ala Tyr Lys Ala Ser Trp Ser Gly Ser Lys Ala
20 25 30

Trp Gln Ser Leu Ser Gln Gly Lys Leu Gln Ala Ala Asn Ser Pro His

35 40 45

Gly Ser Ser Pro Ser Leu Pro Ala Gln Ser Pro Gly Gln Gly Pro Pro 60 50 55 Arg Lys Ala Leu Val Glu Asn Leu Cys Met Lys Ala Val Asn Gln Ser 70 75 80 65 Ile Gly Lys Pro Gly Cys Leu Gln Leu Gly Gly Gln Thr Gly Trp Arg 85 90 95 Arg Gly Glu Glu Glu Arg Gly Leu Pro Ala Leu Ser Pro Thr 105 100 110

<210> 3405

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3405

Met Thr Arg Gly Thr Gln Gly Leu Pro Met Thr Met Gly Pro Arg Gly

1 5 10 15

Arg His Leu Ala Gln Gly Pro Val Leu Glu Thr Asp Asp Pro Arg Arg
20 25 30

Arg Arg Gln Gly Arg Glu Ala Gly Arg Ala Gly Met Val Ser Gln
35 40 45

Ala Glu Gly Arg Thr Arg Thr Arg Met Glu Leu Gly Asn Asp Pro Gly
50 55 60

Val Phe Gly Gly Cys Arg Trp Val Arg Met Ala Val Gln Gly Gly Lys
65 70 75 80

Gly Cys Val Ala Gly Glu Gln Pro Gly Glu Ala Gln Thr Leu Leu Lys

85

90

95

Arg Cys Leu Leu Cys Arg Pro Pro His Pro Leu Pro Ala Pro Ser Gly

100 105 110

Ala Pro Ala Pro Pro Cys Ser Ala

115 120

<210> 3406

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3406

Met Arg Glu Val Gly Glu Ala Arg Glu Ala His Gly Ala Pro Ala Gln

1 5 10 15

Ala Pro His Thr Pro Ser Val Val Thr Val Ala His Glu Val Asn Ser

20 25 30

Pro Pro Pro Leu Gly Glu Lys Glu Ala Ala Trp Ala Ala Thr Cys Ser

35 40 45

Pro Ala Leu Pro Pro Pro Thr Ala Leu Met Asp Pro Ser Leu Pro Gly

50 55 60

Gly His Cys Phe Val Gly Phe Ser Pro Phe Val Gly Lys Gly Arg Cys

65 70 75 80

Pro Ala Gly Leu Gly Leu Val Arg Glu Glu Ser Arg Ala Leu Glu Arg

85 90 95

Gly Ala Gln His

100

<210> 3407

<211> 258

<212> PRT

<213> Homo sapiens

<400> 3407

Met Ala Ser Leu Leu Phe Leu Val Val Asn Leu Thr Cys Ala Met Leu

1 5 10 15

Val His Gly Asp Val Pro Glu Asn Gln Leu Lys Trp Thr Val Phe Val
20 25 30

Arg Ala Leu Ile Asn Asp Ser Leu Phe Ile Leu Cys Ala Ile Ser Leu
35 40 45

Val Cys Tyr Ile Cys Lys Ile Thr Lys Met Ser Ser Ala Asn Val Tyr
50 55 60

Leu Glu Ser Lys Gly Met Ser Leu Cys Gln Thr Val Val Gly Ser
65 70 75 80

Val Val Ile Leu Leu Tyr Ser Ser Arg Ala Cys Tyr Asn Leu Val Val

85 90 95

Val Thr Ile Ser Gln Asp Thr Leu Glu Ser Pro Phe Asn Tyr Gly Trp

100 105 110

Asp Asn Leu Ser Asp Lys Ala His Val Glu Asp Ile Ser Gly Glu Glu
115 120 125

Tyr Ile Val Phe Gly Met Val Leu Phe Leu Trp Glu His Val Pro Ala 130 135 140

Trp Ser Val Val Leu Phe Phe Arg Ala Gln Arg Leu Asn Gln Asn Leu 145 150 155 160

Ala Pro Ala Gly Met Ile Asn Ser His Ser Tyr Ser Ser Arg Ala Tyr

165 170 175

Phe Phe Asp Asn Pro Arg Arg Tyr Asp Ser Asp Asp Asp Leu Pro Arg 180 185 190

Leu Gly Ser Ser Arg Glu Gly Ser Leu Pro Asn Ser Gln Ser Leu Gly

195 200 205 Trp Tyr Gly Thr Met Thr Gly Cys Gly Ser Ser Ser Tyr Thr Val Thr 210 215 220 Pro His Leu Asn Gly Pro Met Thr Asp Thr Ala Pro Leu Leu Phe Thr 230 235 240 225 Cys Ser Asn Leu Asp Leu Asn Asn His His Ser Leu Tyr Val Thr Pro 245 250 255 Gln Asn

<210> 3408

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3408

Met Ser Ala Thr Leu Arg Glu Arg Leu Arg Lys Thr Arg Phe Ser Phe

1 5 10 15

Asn Ser Ser Tyr Asn Val Val Lys Arg Leu Lys Val Glu Ser Glu Glu
20 25 30

Asn Asp Gln Thr Phe Ser Glu Lys Pro Ala Ser Ser Thr Glu Glu Asn
35 40 45

Cys Leu Glu Phe Gln Glu Ser Phe Lys His Ile Asp Ser Glu Phe Glu
50 55 60

Glu Asn Thr Asn Leu Lys Asn Thr Leu Lys Asn Leu Asn Val Cys Glu
65. 70 75 80

Ser Gln Ser Leu Asp Ser Gly Ser Cys Ser Ala Leu Gln Asn Glu Phe
85 90 95

Val Ser Glu Lys Leu Pro Lys Gln Arg Leu Asn Ala Glu Lys Ala Lys 100 105 110 Leu Val Lys Gln Val Gln Glu Lys Glu Asp Leu Leu Arg Arg Leu Lys 120 125 115 Leu Val Lys Met Tyr Arg Ser Lys Asn Asp Leu Ser Gln Leu Gln Leu 130 135 140 Leu Ile Lys Lys Trp Arg Ser Cys Ser Gln Leu Leu Leu Tyr Glu Leu 160 145 150 155 Gln Ser Ala Val Ser Glu Glu Asn Lys Lys Leu Ser Leu Thr Gln Leu 165 170 175 Ile Asp His Tyr Gly Leu Asp Asp Arg Leu Leu His Tyr Asn Arg Ser 180 190 185 Glu Glu Glu Phe Ile Asp Val 195

<210> 3409

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3409

Met Pro Lys Gly Gly Cys Pro Lys Ala Pro Gln Gln Glu Glu Leu Pro
1 5 10 15

Leu Ser Ser Asp Met Val Glu Lys Gln Thr Gly Lys Lys Asp Lys Asp 20 25 30

Lys Val Ser Leu Thr Lys Thr Pro Lys Leu Glu Arg Gly Asp Gly Gly
35 40 45

Lys Glu Val Arg Glu Arg Ala Ser Lys Arg Lys Leu Pro Phe Thr Ala

60 50 55 Gly Ala Asn Gly Glu Gln Lys Asp Ser Asp Thr Gly Pro Pro Gly Ser 70 80 75 65 Cys Leu Ser Trp Gly Ser His Glu Gly Ala Leu Val Arg Ser Ala Met 90 95 85 Gly Arg Ser Cys Leu Pro Ser Ala Arg Gly Cys Phe Phe Gly Thr Arg 105 100 110 Gly Lys Ile Met Ile Phe Leu Phe Cys Phe Asp Leu 115 120

<210> 3410

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3410

Met Pro Phe Ala Glu Asp Lys Thr Tyr Lys Tyr Ile Cys Arg Asn Phe

1 5 10 15

Ser Asn Phe Cys Asn Val Asp Val Val Glu Ile Leu Pro Tyr Leu Pro
20 25 30

Cys Leu Thr Ala Arg Asp Gln Asp Arg Leu Arg Ala Thr Cys Thr Leu
35 40 45

Ser Gly Asn Arg Asp Thr Leu Trp His Leu Phe Asn Thr Leu Gln Leu 50 55 60

Pro Thr Trp Ala Gly Glu Glu Thr Pro Gly Gly Gln Ser Ser Gly Arg

70 75 80

Gly Leu Asp Phe Ser Ser Leu Thr Ser Gly Ala Val Trp Leu Trp Gln

85 90 95

Met Ser Asp Phe Trp Ser Cys Phe Ser Thr Trp Thr Val Ser Ile Trp Leu Ile Leu His Trp Val Leu Leu Arg Leu Asn Leu Gln Val Phe Ala Lys Cys Leu Ala Gln Ser Lys Trp Pro Leu Leu Pro Ser Leu Ser Cys Pro Thr Trp <210> 3411 <211> 527 <212> PRT <213> Homo sapiens <400> 3411 Met Leu Ala Lys Pro His Gln Arg Leu Thr Lys Tyr Pro Leu Leu Leu Lys Ser Val Leu Arg Lys Thr Glu Glu Pro Arg Ala Lys Glu Ala Val Val Ala Met Ile Gly Ser Val Glu Arg Phe Ile His His Val Asn Ala Cys Met Arg Gln Arg Gln Glu Arg Gln Arg Leu Ala Ala Val Ser Arg Ile Asp Ala Tyr Glu Val Val Glu Ser Ser Ser Asp Glu Val Asp Lys Leu Leu Lys Glu Phe Leu His Leu Asp Leu Thr Ala Pro Ile Pro

Gly Ala Ser Pro Glu Glu Thr Arg Gln Leu Leu Glu Gly Ser Leu

			100					105					110		
Arg	Met	Lys	Glu	Gly	Lys	Asp	Ser	Lys	Met	Asp	Val	Tyr	Cys	Phe	Leu
		115					120					125			
Phe	Thr	Asp	Leu	Leu	Leu	Val	Thr	Lys	Ala	Val	Lys	Lys	Ala	Glu	Arg
	130					135					140				
Thr	Arg	Val	Ile	Arg	Pro	Pro	Leu	Leu	Val	Asp	Lys	Ile	Val	Cys	Arg
145					150					155					160
Glu	Leu	Arg	Asp	Pro	Gly	Ser	Phe	Leu	Leu	Ile	Tyr	Leu	Asn	Glu	Phe
				165					170					175	
His	Ser	Ala	Val	Gly	Ala	Tyr	Thr	Phe	Gln	Ala	Ser	Gly	Gln	Ala	Leu
			180					185					190		
Cys	Arg	Gly	Trp	Val	Asp	Thr	Ile	Tyr	Asn	Ala	Gln	Asn	Gln	Leu	Gln
		195					200					205			
Gln	Leu	Arg	Ala	Gln	Glu	Pro	Pro	Gly	Ser	Gln	Gln	Pro	Leu	Gln	Ser
	210					215					220				
Leu	Glu	Glu	Glu	Glu	Asp	Glu	Gln	Glu							
225					230					235					240
Glu	Glu	Glu	Glu	Gly	Glu	Asp	Ser	Gly	Thr	Ser	Ala	Ala	Ser	Ser	Pro
				245					250					255	
Thr	Ile	Met	Arg	Lys	Ser	Ser	Gly	Ser	Pro	Asp	Ser	Gln	His	Cys	Ala
			260					265					270		
Ser	Asp	Gly	Ser	Thr	Glu	Thr	Leu	Ala	Met	Val	Val	Val	Glu	Pro	Gly
		275					280					285			
Asp	Thr	Leu	Ser	Ser	Pro	Glu	Phe	Asp	Ser	Gly	Pro	Phe	Ser	Ser	Gln
	290					295					300				
Ser	Asp	Glu	Thr	Ser	Leu	Ser	Thr	Thr	Ala	Ser	Ser	Ala	Thr	Pro	Thr
305					310					315					320
Ser	Glu	Leu	Leu	Pro	Leu	Gly	Pro	Val	Asp	Gly	Arg	Ser	Cys		Met
				325					330					335	

Asp Ser Ala Tyr Gly Thr Leu Ser Pro Thr Ser Leu Gln Asp Phe Val Ala Pro Gly Pro Met Ala Glu Leu Val Pro Arg Ala Pro Glu Ser Pro Arg Val Pro Ser Pro Pro Pro Ser Pro Arg Leu Arg Arg Arg Thr Pro Val Gln Leu Leu Ser Cys Pro Pro His Leu Leu Lys Ser Lys Ser Glu Ala Ser Leu Leu Gln Leu Leu Ala Gly Ala Gly Thr His Gly Thr Pro Ser Ala Pro Ser Arg Ser Leu Ser Glu Leu Cys Leu Ala Val Pro Ala Pro Gly Ile Arg Thr Gln Gly Ser Pro Gln Glu Ala Gly Pro Ser Trp Asp Cys Arg Gly Ala Pro Ser Pro Gly Ser Gly Pro Gly Leu Val Gly Cys Leu Ala Gly Glu Pro Ala Gly Ser His Arg Lys Arg Cys Gly Asp Leu Pro Ser Gly Ala Ser Pro Arg Val Gln Pro Glu Pro Pro Pro Gly Val Ser Ala Gln His Arg Lys Leu Thr Leu Ala Gln Leu Tyr Arg Ile Arg Thr Thr Leu Leu Leu Asn Ser Thr Leu Thr Ala Ser Glu Val

<210> 3412

<211> 632

<212> PRT

<213> Homo sapiens

<400> 3412

Met Trp Leu Lys Pro Glu Glu Val Leu Leu Lys Asn Ala Leu Lys Leu

1 5 10 15

Trp Leu Met Glu Arg Ser Asn Asp Tyr Phe Val Leu Gln Arg Arg Arg

20 25 30

Gly Tyr Gly Glu Glu Gly Gly Gly Leu Thr Gly Leu Leu Val Gly

35 40 45

Thr Leu Asp Ser Val Leu Asp Ser Thr Ala Lys Val Ala Pro Phe Arg

50 55 60

Ile Leu His Gln Thr Pro Asp Ser Gln Val Tyr Leu Ser Ile Ala Cys

65 70 75 80

Gly Ala Asn Arg Glu Glu Ile Thr Lys His Trp Asp Trp Leu Glu Gln

85 90 95

Asn Ile Met Lys Thr Leu Ser Val Phe Asp Ser Asn Glu Asp Ile Thr

100 105 110

Asn Phe Val Gln Gly Lys Ile Arg Gly Leu Ile Ala Glu Glu Gly Lys

115 120 125

His Cys Phe Ala Lys Glu Asp Asp Pro Glu Lys Phe Arg Glu Ala Leu

130 135 140

Leu Lys Phe Glu Lys Cys Phe Gly Leu Pro Glu Lys Glu Lys Leu Val

145 150 155 160

Thr Tyr Tyr Ser Cys Ser Tyr Trp Lys Gly Arg Val Pro Cys Gln Gly

165 170 175

Trp Leu Tyr Leu Ser Thr Asn Phe Leu Ser Phe Tyr Ser Phe Leu Leu

180 185 190

Gly Ser Glu Ile Lys Leu Ile Ile Ser Trp Asp Glu Val Ser Lys Leu

195 200 205

Glu Lys	Thr	Ser	Asn	Val	Ile	Leu	Thr	Glu	Ser	Ile	His	Val	Cys	Ser
210					215					220				
Gln Gly	Glu	Asn	His	Tyr	Phe	Ser	Met	Phe	Leu	His	Ile	Asn	Gln	Thr
225				230					235					240
Tyr Leu	Leu	Met	Glu	Gln	Leu	Ala	Asn	Tyr	Ala	Ile	Arg	Arg	Leu	Phe
			245					250					255	
Asp Lys	Glu	Thr	Phe	Asp	Asn	Asp	Pro	Val	Leu	Tyr	Asn	Pro	Leu	Gln
		260					265					270		
Ile Thr	Lys	Arg	Gly	Leu	Glu	Asn	Arg	Ala	His	Ser	Glu	Gln	Phe	Asn
	275				•	280					285			
Ala Phe	Phe	Arg	Leu	Pro	Lys	Gly	Glu	Ser	Leu	Lys	Glu	Val	His	Glu
290					295					300				
Cys Phe	Leu	Trp	Val	Pro	Phe	Ser	His	Phe	Asn	Thr	His	Gly	Lys	Met
305				310					315					320
Cys Ile	Ser	Glu	Asn	Tyr	Ile	Cys	Phe	Ala	Ser	Gln	Asp	Gly	Asn	Gln
			325					330					335	
Cys Ser	Val	Ile	Ile	Pro	Leu	Arg	Glu	Val	Leu	Ala	Ile	Asp	Lys	Thr
		340					345					350		
Asn Asp	Ser	Ser	Lys	Ser	Val	Ile	Ile	Ser	Ile	Lys	Gly	Lys	Thr	Ala
	355					360					365			
Phe Arg	Phe	His	Glu	Val		Asp	Phe	Glu	Gln		Val	Ala	Lys	Leu
370		_			375				_	380			_	
Arg Leu	Arg	Cys	Gly		Ala	Ser	Thr	Gln		His	Asp	Ile	Ser	
385			_	390		_		. -	395	_				400
Glu Leu	Ala	Ile		Ser	Glu	Ser	Thr		Pro	Ser	Asp	Asn		Glu
			405					410	_				415	
Val Gln	Ser		Thr	Ser	Gln	Arg		Cys	Ser	Lys	Thr		Asn	Thr
	_	420					425			_		430	_	
Glu Ala	Leu	Met	Thr	Val	Phe	His	Pro	Gln	Asn	Leu	Glu	Thr	Leu	Asn

Ser Lys Met Leu Lys Glu Lys Met Lys Glu Gln Ser Trp Lys Ile Leu Phe Ala Glu Cys Gly Arg Gly Val Ser Met Phe Arg Thr Lys Lys Thr Arg Asp Leu Val Val Arg Gly Ile Pro Glu Thr Leu Arg Gly Glu Leu Trp Met Leu Phe Ser Gly Val Val Asn Asp Met Ala Thr Asn Pro Asp Tyr Tyr Thr Glu Val Val Glu Gln Ser Leu Gly Thr Cys Asn Leu Ala Thr Glu Glu Ile Glu Arg Asp Leu Arg Arg Ser Leu Pro Glu His Pro Ala Phe Gln Ser Asp Thr Gly Ile Ser Ala Leu Arg Arg Val Leu Thr Ala Tyr Ala Tyr Arg Asn Pro Lys Ile Gly Tyr Cys Gln Ala Met Asn Ile Leu Thr Ser Val Leu Leu Leu Tyr Ala Lys Glu Glu Glu Ala Phe Trp Leu Leu Val Ala Val Cys Glu Arg Met Leu Pro Asp Tyr Phe Asn Arg Arg Ile Ile Gly Ser Asp Asp Phe Met Pro Leu Val Arg Ile Gln Gly Gln Cys Val Ile Gly Glu Lys

<210> 3413

<211> 186

<212> PRT <213> Homo sapiens

<400> 3413

Met Gly Leu Met Met Val Gly Val Leu Ile Gly Thr Phe Ile Ala His

1 5 10 15

Val Val Cys Lys Arg Leu Leu Thr Ala Trp Val Ala Ala Arg Ile Gln
20 25 30

Ser Ser Glu Lys Leu Ser Ala Val Ile Arg Val Val Glu Gly Gly Ser 35 40 45

Gly Leu Lys Val Val Ala Leu Ala Arg Leu Thr Pro Ile Pro Phe Gly
50 55 60

Leu Gln Asn Ala Val Phe Ser Ile Thr Asp Leu Ser Leu Pro Asn Tyr 65 70 75 80

Leu Met Ala Ser Ser Val Gly Leu Leu Pro Thr Gln Leu Leu Asn Ser 85 90 95

Tyr Leu Gly Thr Thr Leu Arg Thr Met Glu Asp Val Ile Ala Glu Gln
100 105 110

Ser Val Ser Gly Tyr Phe Val Phe Cys Leu Gln Ile Ile Ile Ser Ile 115 120 125

Gly Leu Met Phe Tyr Val Val His Arg Ala Gln Val Glu Leu Asn Ala 130 135 140

Ala Ile Val Ala Cys Glu Met Glu Leu Lys Ser Ser Leu Val Lys Gly
145 150 155 160

Asn Gln Pro Asn Thr Ser Gly Ser Ser Phe Tyr Asn Lys Arg Thr Leu 165 170 175

Thr Phe Ser Gly Gly Gly Ile Asn Val Val 180 185

<210> 3414 <211> 156 <212> PRT <213> Homo sapiens <400> 3414 Met Gln Val Pro Pro Leu Tyr Ser Ala Leu Lys Lys Asp Gly Gln Arg Leu Ser Thr Leu Met Lys Arg Gly Glu Val Val Glu Ala Lys Pro Ala Arg Pro Val Thr Val Tyr Ser Ile Ser Leu Gln Lys Phe Gln Pro Pro Phe Phe Thr Leu Asp Val Glu Cys Gly Gly Gly Phe Tyr Ile Arg Ser Leu Val Ser Asp Ile Gly Lys Glu Leu Ser Ser Cys Ala Asn Val Leu Glu Leu Thr Arg Thr Lys Gln Gly Pro Phe Thr Leu Glu Glu His Ala Leu Pro Glu Asp Lys Trp Thr Ile Asp Asp Ile Ala Gln Ser Leu Glu His Cys Ser Ser Leu Phe Pro Ala Glu Leu Ala Leu Lys Lys Ser Lys Pro Glu Ser Asn Glu Gln Val Leu Ser Cys Glu Tyr Ile Thr Leu Asn

Glu Pro Lys Arg Glu Asp Asp Val Ile Lys Thr Cys

<210> 3415 <211> 373 <212> PRT <213> Homo sapiens

<400> 3415

Met Arg Val Cys Ser Tyr Glu Cys Leu Pro Trp Glu Glu Ala Met Arg 1 5 10 15

Thr Glu Leu Glu Ser Arg Ser Ser Gly Ser Glu Arg Glu Glu
20 25 30

Arg Gln Arg Leu Glu Thr Ile Leu Ser Leu Cys Ala Glu Tyr Thr Lys

35 40 45

Pro Asp Ser Arg Leu Ser Thr Gly Thr Thr Val Glu Asp Val Gln Lys
50 55 60

Ile Asn Lys Glu Leu Glu Lys Leu Gln Leu Ser Asp Glu Glu Ser Val
65 70 75 80

Phe Glu Glu Ala Leu Met Ser Pro Asp Thr Arg Tyr Arg Cys His Arg

85 90 95

Lys Asp Ser Leu Pro Asp Ala Asp Leu Ala Ser Cys Gly Ser Phe Ser

100 105 110

Gln Ser Ser Ala Ser Phe Phe Thr Pro Arg Ser Thr Arg Asn Asp Glu 115 120 . 125

Leu Leu Ser Asp Leu Thr Arg Thr Pro Pro Pro Pro Ser Ser Thr Phe
130 135 140

Pro Lys Ala Ser Ser Glu Ser Ser Tyr Leu Ser Ile Leu Pro Lys Thr 145 150 155 160

Pro Glu Gly Ile Ser Glu Glu Gln Arg Ser Gln Glu Leu Ala Ala Met 165 170 175

Glu Glu Thr Arg Ile Val Ile Leu Asn Asn Leu Glu Glu Leu Lys Gln

			180					185					190		
Lys	Ile	Lys	Asp	Ile	Asn	Asp	Gln	Met	Asp	Glu	Ser	Phe	Arg	Glu	Leu
		195					200					205			
Asp	Met	Glu	Cys	Ala	Leu	Leu	Asp	Gly	Glu	Gln	Lys	Ser	Glu	Thr	Thr
	210					215					220				
Glu	Leu	Met	Lys	Glu	Lys	Glu	Ile	Leu	Asp	His	Leu	Asn	Arg	Lys	Ile
225					230					235					240
Ala	Glu	Leu	Glu	Lys	Asn	Ile	Val	Gly	Glu	Lys	Thr	Lys	Glu	Lys	Val
				245					250					255	
Lys	Leu	Asp	Ala	Glu	Arg	Glu	Lys	Leu	Glu	Arg	Leu	Gln	Glu	Leu	Tyr
			260					265					270		
Ser	Glu	Gln	Lys	Thr	Gln	Leu	Asp	Asn	Cys	Pro	Glu	Ser	Met	Arg	Glu
		275					280					285			
Gln	Leu	Gln	Gln	Gln	Leu	Lys	Arg	Asp	Ala	Asp	Leu	Leu	Asp	Val	Glu
	290					295					300				
Ser	Lys	His	Phe	Glu	Asp	Leu	Glu	Phe	Gln	Gln	Leu	Glu	His	Glu	Ser
305					310					315					320
Arg	Leu	Asp	Glu	Glu	Lys	Glu	Asn	Leu	Thr	Gln	Gln	Leu	Leu	Arg	Glu
				325					330					335	
Val	Ala	Glu	Tyr	Gln	Arg	Asn	Ile	Val	Ser	Arg	Lys	Glu	Lys	Ile	Ser
			340					345					350		
Ala	Leu	Lys	Lys	Gln	Ala	Asn	His	Ile	Val	Gln	Gln	Ala	Gln	Arg	Glu
		355					360					365			
Gln	Asp	His	Phe	Val											
	370														

<210> 3416

<211> 847

<212> PRT

<213> Homo sapiens

<400> 3416

Met Asn Ala Ser Asn Asp Ile Thr Met Glu Asn Val Val His Glu Leu

1 5 10 15

Glu Leu Tyr Asn Thr Gly Tyr Tyr Leu Gly Met Phe Met Asn Ser Phe
20 25 30

Ala Val Phe Gln Glu Cys Gly Leu Trp Val Leu Thr Asp Ala Asn Leu
35 40 45

Thr Lys Asp Tyr Ile Asp Gly Val Tyr Asp Asn Ala Glu Tyr Ala Glu
50 55 60

Arg Phe Met Glu Glu Asn Glu Gly His Ile Val Asp Ile His Asp Phe
65 70 75 80

Ser Leu Gly Ser Ser Pro His Val Arg Lys His Phe Pro Glu Thr Trp

85 90 95

Ile Trp Leu Asp Thr Asn Met Gly Ser Arg Ile Tyr Gln Glu Phe Glu
100 105 110

Val Thr Val Pro Asp Ser Ile Thr Ser Trp Val Ala Thr Gly Phe Val
115 120 125

Ile Ser Glu Asp Leu Gly Leu Gly Leu Thr Thr Pro Val Glu Leu
130 135 140

Gln Ala Phe Gln Pro Phe Phe Ile Phe Leu Asn Leu Pro Tyr Ser Val 145 150 155 160

Ile Arg Gly Glu Glu Phe Ala Leu Glu Ile Thr Ile Phe Asn Tyr Leu 165 170 175

Lys Asp Ala Thr Glu Val Lys Val Ile Ile Glu Lys Ser Asp Lys Phe 180 185 190

Asp Ile Leu Met Thr Ser Ser Glu Ile Asn Ala Thr Gly His Gln Gln

		195					200					205			
Thr	Leu	Leu	Val	Pro	Ser	Glu	Asp	Gly	Ala	Thr	Val	Leu	Phe	Pro	Ile
	210					215					220				
Arg	Pro	Thr	His	Leu	Gly	Glu	Ile	Pro	Ile	Thr	Val	Thr	Ala	Leu	Ser
225					230					235					240
Pro	Thr	Ala	Ser	Asp	Ala	Ile	Thr	Gln	Met	Ile	Leu	Val	Lys	Ala	Glu
				245					250					255	
Gly	Ile	Glu	Lys	Ser	Tyr	Ser	Gln	Ser	Ile	Leu	Leu	Asp	Leu	Thr	Asp
			260					265					270		
Asn	Arg	Leu	Gln	Ser	Thr	Leu	Lys	Thr	Leu	Ser	Phe	Ser	Phe	Pro	Pro
		275					280					285			
Asn	Thr	Val	Thr	Gly	Ser	Glu	Arg	Val	Gln	Ile	Thr	Ala	Ile	Gly	Asp
	290					295					300				
Val	Leu	Gly	Pro	Ser	Ile	Asn	Gly	Leu	Ala	Ser	Leu	Ile	Arg	Met	Pro
305					310					315					320
Tyr	Gly	Cys	Gly	Glu	Gln	Asn	Met	Ile	Asn	Phe	Ala	Pro	Asn	Ile	Tyr
				325					330					335	
Ile	Leu	Asp	Tyr	Leu	Thr	Lys	Lys	Lys	Gln	Leu	Thr	Asp	Asn	Leu	Lys
			340					345					350		
Glu	Lys	Ala	Leu	Ser	Phe	Met	Arg	Gln	Gly	Tyr	Gln	Arg	Glu	Leu	Leu
		355					360					365			
Tyr	Gln	Arg	Glu	Asp	Gly	Ser	Phe	Ser	Ala	Phe	Gly	Asn	Tyr	Asp	Pro
	370					375					380				
Ser	Gly	Ser	Thr	Trp	Leu	Ser	Ala	Phe	Val	Leu	Arg	Cys	Phe	Leu	Glu
385					390					395					400
Ala	Asp	Pro	Tyr	Ile	Asp	Ile	Asp	Gln	Asn	Val	Leu	His	Arg	Thr	Tyr
				405					410					415	
Thr	Trp	Leu	Lys	Gly	His	Gln	Lys	Ser	Asn	Gly	Glu	Phe	Trp	Asp	Pro
			420					425					430		

Gly	Arg	Val	Ile	His	Ser	Glu	Leu	Gln	Gly	Gly	Asn	Lys	Ser	Pro	Val
		435					440					445			
Thr	Leu	Thr	Ala	Tyr	Ile	Val	Thr	Ser	Leu	Leu	Gly	Tyr	Arg	Lys	Tyr
	450					455					460				
Gln	Pro	Asn	Ile	Asp	Val	Gln	Glu	Ser	Ile	His	Phe	Leu	Glu	Ser	Glu
465					470					475					480
Phe	Ser	Arg	Gly	Ile	Ser	Asp	Asn	Tyr	Thr	Leu	Ala	Leu	Ile	Thr	Tyr
				485					490					495	
Ala	Leu	Ser	Ser	Val	Gly	Ser	Pro	Lys	Ala	Lys	Glu	Ala	Leu	Asn	Met
			500					505					510		
Leu	Thr	Trp	Arg	Ala	Glu	Gln	Glu	Gly	Gly	Met	Gln	Phe	Trp	Val	Ser
		515					520					525			
Ser	Glu	Ser	Lys	Leu	Ser	Asp	Ser	Trp	Gln	Pro	Arg	Ser	Leu	Asp	Ile
	530					535					540				
Glu	Val	Ala	Ala	Tyr	Ala	Leu	Leu	Ser	His	Phe	Leu	Gln	Phe	Gln	Thr
545					550					555					560
Ser	Glu	Gly	Ile	Pro	Ile	Met	Arg	Trp	Leu	Ser	Arg	Gln	Arg	Asn	Ser
				565					570					575	
Leu	Gly	Gly	Phe	Ala	Ser	Thr	Gln	Asp	Thr	Thr	Val	Ala	Leu	Lys	Ala
			580					585					590		
Leu	Ser	Glu	Phe	Ala	Ala	Leu	Met	Asn	Thr	Glu	Arg	Thr	Asn	Ile	Gln
		595					600					605			
Val	Thr	Val	Thr	Gly	Pro	Ser	Ser	Pro	Ser	Pro	Val	Lys	Phe	Leu	Ile
	610					615					620				
Asp	Thr	His	Asn	Arg	Leu	Leu	Leu	Gln	Thr	Ala	Glu	Leu	Ala	Val	Val
625					630					635					640
Gln	Pro	Thr	Ala	Val	Asn	Ile	Ser	Ala	Asn	Gly	Phe	Gly	Phe	Ala	Ile
				645					650					655	
Cvs	Gln	Leu	Asn	Val	Val	Tvr	Asn	Val	Lvs	Ala	Ser	Gly	Ser	Ser	Arg

Arg Arg Arg Ser Ile Gln Asn Gln Glu Ala Phe Asp Leu Asp Val Ala Val Lys Glu Asn Lys Asp Asp Leu Asn His Val Asp Leu Asn Val Cys Thr Ser Phe Ser Gly Pro Gly Arg Ser Gly Met Ala Leu Met Glu Val Asn Leu Leu Ser Gly Phe Met Val Pro Ser Glu Ala Ile Ser Leu Ser Glu Thr Val Lys Lys Val Glu Tyr Asp His Gly Lys Leu Asn Leu Tyr Leu Asp Ser Val Asn Glu Thr Gln Phe Cys Val Asn Ile Pro Ala Val Arg Asn Phe Lys Val Ser Asn Thr Gln Asp Ala Ser Val Ser Ile Val Asp Tyr Tyr Glu Pro Arg Arg Gln Ala Val Arg Ser Tyr Asn Ser Glu Val Lys Leu Ser Ser Cys Asp Leu Cys Ser Asp Val Gln Gly Cys Arg Pro Cys Glu Asn Gly Ala Ser Gly Ser His His His Ser Ser Val Ile Phe Ile Phe Cys Phe Lys Leu Leu Tyr Phe Met Glu Leu Trp Leu

<210> 3417

<211> 653

<212> PRT

<213> Homo sapiens

<400> 3417 Met Val Glu Leu Val Asn Ile Glu Pro Val Cys Val Arg Gly Gly Leu Tyr Glu Val Asp Val Thr Gln Gly Glu Cys Tyr Pro Val Tyr Trp Asn Gln Ala Asp Lys Ile Pro Val Met Arg Gly Gln Trp Phe Ile Asp Gly Thr Trp Gln Pro Leu Glu Glu Glu Glu Ser Asn Leu Ile Glu Gln Glu His Leu Asn Cys Phe Arg Gly Gln Gln Met Gln Glu Asn Phe Asp Ile Glu Val Ser Lys Ser Ile Asp Gly Lys Asp Ala Val His Ser Phe Lys Leu Ser Arg Asn His Val Asp Trp His Ser Val Asp Glu Val Tyr Leu Tyr Ser Asp Ala Thr Thr Ser Lys Ile Ala Arg Thr Val Thr Gln Lys Leu Gly Phe Ser Lys Ala Ser Ser Ser Gly Thr Arg Leu His Arg Gly Tyr Val Glu Glu Ala Thr Leu Glu Asp Lys Pro Ser Gln Thr Thr His Ile Val Phe Val Val His Gly Ile Gly Gln Lys Met Asp Gln Gly Arg Ile Ile Lys Asn Thr Ala Met Met Arg Glu Ala Ala Arg Lys Ile Glu Glu Arg His Phe Ser Asn His Ala Thr His Val Glu Phe Leu Pro Val Glu Trp Arg Ser Lys Leu Thr Leu Asp Gly Asp Thr Val Asp Ser Ile

	210					215					220				
Thr	Pro	Asp	Lys	Val	Arg	Gly	Leu	Arg	Asp	Met	Leu	Asn	Ser	Ser	Ala
225					230					235					240
Met	Asp	Ile	Met	Tyr	Tyr	Thr	Ser	Pro	Leu	Tyr	Arg	Asp	Glu	Leu	Val
				245					250					255	
Lys	Gly	Leu	Gln	Gln	Glu	Leu	Asn	Arg	Leu	Tyr	Ser	Leu	Phe	Cys	Ser
			260					265					270		
Arg	Asn	Pro	Asp	Phe	Glu	Glu	Lys	Gly	Gly	Lys	Val	Ser	Ile	Val	Ser
		275					280					285			
His	Ser	Leu	Gly	Cys	Val	Ile	Thr	Tyr	Asp	Ile	Met	Thr	Gly	Trp	Asn
	290					295					300				
Pro	Val	Arg	Leu	Tyr	Glu	Gln	Leu	Leu	Gln	Lys	Glu	Glu	Glu	Leu	Pro
305					310					315					320
Asp	Glu	Arg	Trp	Met	Ser	Tyr	Glu	Glu	Arg	His	Leu	Leu	Asp	Glu	Leu
				325					330					335	
Tyr	Ile	Thr	Lys	Arg	Arg	Leu	Lys	Glu	Ile	Glu	Glu	Arg	Leu	His	Gly
			340					345					350		
Leu	Lys	Ala	Ser	Ser	Met	Thr	Gln	Thr	Pro	Ala	Leu	Lys	Phe	Lys	Val
		355					360					365			
Glu	Asn	Phe	Phe	Cys	Met	Gly	Ser	Pro	Leu	Ala	Val	Phe	Leu	Ala	Leu
	370					375					380				
Arg	Gly	Ile	Arg	Pro	Gly	Asn	Thr	Gly	Ser	Gln	Asp	His	Ile	Leu	Pro
385					390					395					400
Arg	Glu	Ile	Cys	Asn	Arg	Leu	Leu	Asn	Ile	Phe	His	Pro	Thr	Asp	Pro
				405					410					415	
Val	Ala	Tyr	Arg	Leu	Glu	Pro	Leu	Ile	Leu	Lys	His	Tyr	Ser	Asn	Ile
			420					425					430		
Ser	Pro	Val	Gln	Ile	His	Trp	Tyr	Asn	Thr	Ser	Asn	Pro	Leu	Pro	Tyr
		435					440					445			

Glu	His	Met	Lys	Pro	Ser	Phe	Leu	Asn	Pro	Ala	Lys	Glu	Pro	Thr	Ser
	450					455					460				
Val	Ser	Glu	Asn	Glu	Gly	Ile	Ser	Thr	Ile	Pro	Ser	Pro	Val	Thr	Ser
465					470					475					480
Pro	Val	Leu	Ser	Arg	Arg	His	Tyr	Gly	Glu	Ser	Ile	Thr	Asn	Ile	Gly
				485					490					495	
Lys	Ala	Ser	Ile	Leu	Gly	Ala	Ala	Ser	Ile	Gly	Lys	Gly	Leu	Gly	Gly
			500					505					510		
Met	Leu	Phe	Ser	Arg	Phe	Gly	Arg	Ser	Ser	Thr	Thr	Gln	Ser	Ser	Glu
		515					520					525			
Thr	Ser	Lys	Asp	Ser	Met	Glu	Asp	Glu	Lys	Lys	Pro	Val	Ala	Ser	Pro
	530					535					540				
_	۸۱.	Th	The	Val	C1 ₃₇	Thr	Gln	Thr	Len	Pro	His	Ser	Ser	Sor	Glv
Ser	на	Ш	1111	vai	Gry	1111	0111	1111	LCu	110	••••	JCI	JCI	JCI	Uly
Ser 545	міа	Inr	1111	vai	550	1111	OIII	1111	Deu	555		501	501	561	560
545					550					555	Ser				560
545					550					555					560
545 Phe	Leu	Asp	Ser	Ala 565	550 Tyr	Phe	Arg	Leu	Gln 570	555 Glu		Phe	Phe	Asn 575	560 Leu
545 Phe	Leu	Asp	Ser	Ala 565	550 Tyr	Phe	Arg	Leu	Gln 570	555 Glu	Ser	Phe	Phe	Asn 575	560 Leu
545 Phe Pro	Leu Gln	Asp Leu	Ser Leu 580	Ala 565 Phe	550 Tyr Pro	Phe Glu	Arg Asn	Leu Val 585	Gln 570 Met	555 Glu Gln	Ser	Phe	Phe Asp 590	Asn 575 Asn	560 Leu Ala
545 Phe Pro	Leu Gln	Asp Leu	Ser Leu 580	Ala 565 Phe	550 Tyr Pro	Phe Glu	Arg Asn	Leu Val 585	Gln 570 Met	555 Glu Gln	Ser Asn	Phe	Phe Asp 590	Asn 575 Asn	560 Leu Ala
545 Phe Pro Leu	Leu Gln Val	Asp Leu Glu 595	Ser Leu 580 Leu	Ala 565 Phe Asp	550 Tyr Pro	Phe Glu Arg	Arg Asn Ile 600	Leu Val 585 Asp	Gln 570 Met Phe	555 Glu Gln Glu	Ser Asn	Phe Lys Arg 605	Phe Asp 590 Glu	Asn 575 Asn Gly	560 Leu Ala Leu
545 Phe Pro Leu	Leu Gln Val	Asp Leu Glu 595	Ser Leu 580 Leu	Ala 565 Phe Asp	550 Tyr Pro	Phe Glu Arg	Arg Asn Ile 600	Leu Val 585 Asp	Gln 570 Met Phe	555 Glu Gln Glu	Ser Asn Leu	Phe Lys Arg 605	Phe Asp 590 Glu	Asn 575 Asn Gly	560 Leu Ala Leu
545 Phe Pro Leu Val	Leu Gln Val Glu 610	Asp Leu Glu 595 Ser	Ser Leu 580 Leu Arg	Ala 565 Phe Asp	550 Tyr Pro His	Phe Glu Arg Ser 615	Arg Asn Ile 600 Ala	Leu Val 585 Asp	Gln 570 Met Phe Thr	555 Glu Gln Glu Ser	Ser Asn Leu His	Phe Lys Arg 605 Thr	Phe Asp 590 Glu Ala	Asn 575 Asn Gly Tyr	560 Leu Ala Leu
545 Phe Pro Leu Val	Leu Gln Val Glu 610	Asp Leu Glu 595 Ser	Ser Leu 580 Leu Arg	Ala 565 Phe Asp	550 Tyr Pro His	Phe Glu Arg Ser 615	Arg Asn Ile 600 Ala	Leu Val 585 Asp	Gln 570 Met Phe Thr	555 Glu Gln Glu Ser	Ser Asn Leu His	Phe Lys Arg 605 Thr	Phe Asp 590 Glu Ala	Asn 575 Asn Gly Tyr	560 Leu Ala Leu
545 Phe Pro Leu Val Ser 625	Leu Gln Val Glu 610 Ser	Asp Leu Glu 595 Ser Leu	Ser Leu 580 Leu Arg	Ala 565 Phe Asp Tyr	550 Tyr Pro His Trp Ala 630	Phe Glu Arg Ser 615 Leu	Arg Asn Ile 600 Ala Phe	Leu Val 585 Asp Val	Gln 570 Met Phe Thr	555 Glu Gln Glu Ser Thr 635	Ser Asn Leu His	Phe Lys Arg 605 Thr	Phe Asp 590 Glu Ala	Asn 575 Asn Gly Tyr	560 Leu Ala Leu Trp

<211> 531

<212> PRT

<213> Homo sapiens

<400> 3418

Met Lys Gly Ala Arg Leu Phe Val Leu Leu Ser Ser Leu Trp Ser Gly

1 5 10 15

Gly Ile Gly Leu Asn Asn Ser Lys His Ser Trp Thr Ile Pro Glu Asp 20 25 30

Gly Asn Ser Gln Lys Thr Met Pro Ser Ala Ser Val Pro Pro Asn Lys
35 40 45

Ile Gln Ser Leu Gln Ile Leu Pro Thr Thr Arg Val Met Ser Ala Glu
50 55 60

Ile Ala Thr Thr Pro Glu Lys Ala Glu Gly Val Val Lys Leu Gln Asn
65 70 75 80

Leu Thr Leu Pro Thr Asn Ala Ser Ile Lys Phe Asn Pro Gly Ala Glu

85 90 95

Ser Val Val Leu Ser Asn Ser Thr Leu Lys Phe Leu Gln Ser Phe Ala 100 105 110

Arg Lys Ser Asn Glu Gln Ala Thr Ser Leu Asn Thr Val Gly Gly Thr
115 120 125

Gly Gly Ile Gly Gly Val Gly Gly Thr Gly Gly Val Gly Asn Arg Ala 130 135 140

Pro Arg Glu Thr Tyr Leu Ser Arg Gly Asp Ser Ser Ser Ser Gln Arg
145 150 155 160

Thr Asp Tyr Gln Lys Ser Asn Phe Glu Thr Thr Arg Gly Lys Asn Trp

165 170 175

Cys Ala Tyr Val His Thr Lys Leu Ser Pro Thr Val Ile Leu Asp Asn 180 185 190

Gln	Val	Thr	Tyr	Val	Pro	Gly	Gly	Lys	Gly	Pro	Cys	Gly	Trp	Thr	Gly
		195					200					205			
Gly	Ser	Cys	Pro	Gln	Arg	Ser	Gln	Lys	Ile	Ser	Asn	Pro	Val	Tyr	Arg
	210					215					220				
Met	Gln	His	Lys	Ile	Val	Thr	Ser	Leu	Asp	Trp	Arg	Cys	Cys	Pro	Gly
225					230					235					240
Tyr	Ser	Gly	Pro	Lys	Cys	Gln	Leu	Arg	Ala	Gln	Glu	Gln	Gln	Ser	Leu
				245					250					255	
Ile	His	Thr	Asn	Gln	Ala	Glu	Ser	His	Thr	Ala	Val	Gly	Arg	Gly	Val
			260					265					270		
Ala	Glu	Gln	Gln	Gln	Gln	Gln	Gly	Cys	Gly	Asp	Pro	Glu	Val	Met	Gln
		275					280					285			
Lys	Met	Thr	Asp	Gln	Val	Asn	Tyr	Gln	Ala	Met	Lys	Leu	Thr	Leu	Leu
	290					295					300				
Gln	Lys	Lys	Ile	Asp	Asn	Ile	Ser	Leu	Thr	Val	Asn	Asp	Val	Arg	Asn
305					310					315					320
Thr	Tyr	Ser	Ser	Leu	Glu	Gly	Lys	Val	Ser	Glu	Asp	Lys	Ser	Arg	Glu
				325					330					335	
Phe	Gln	Ser	Leu	Leu	Lys	Glu	Glu	Tyr	Ser	Ser	Cys	Ser	Arg	His	Pro
			340					345					350		
Cys	Gln	Asn	Gly	Gly	Thr	Cys	Ile	Asn	Gly	Arg	Thr	Ser	Phe	Thr	Cys
		355					360					365			
Ala	Cys	Arg	His	Pro	Phe	Thr	Gly	Asp	Asn	Cys	Thr	Ile	Lys	Leu	Val
	370					375					380				
Glu	Glu	Asn	Ala	Leu	Ala	Pro	Asp	Phe	Ser	Lys	Gly	Ser	Tyr	Arg	Tyr
385					390					395					400
Ala	Pro	Met	Val	Ala	Phe	Phe	Ala	Ser	His	Thr	Tyr	Gly	Met	Thr	Ile
				405					410					415	
Pro	Glv	Pro	Ile	Leu	Phe	Asn	Asn	Leu	Asp	Val	Asn	Tvr	Glv	Ala	Ser

420 425 430 Tyr Thr Pro Arg Thr Gly Lys Phe Arg Ile Pro Tyr Leu Gly Val Tyr 435 440 445 Val Phe Lys Tyr Thr Ile Glu Ser Phe Ser Ala His Ile Ser Gly Phe 460 450 455 Leu Val Val Asp Gly Ile Asp Lys Leu Ala Phe Glu Ser Glu Asn Ile 470 475 480 465 Asn Ser Glu Ile His Cys Asp Arg Val Leu Thr Gly Asp Ala Leu Leu 485 490 495 Glu Leu Asn Tyr Gly Gln Glu Val Trp Leu Arg Leu Ala Lys Gly Thr 500 505 510 Ile Pro Ala Lys Phe Pro Pro Val Thr Thr Phe Ser Gly Tyr Leu Leu 515 520 525 Tyr Arg Thr 530 <210> 3419 <211> 112 <212> PRT <213> Homo sapiens <400> 3419

Met Gln Gln Gly Ser Ala Ser Thr Thr Pro Asp Gln Glu Leu Gln Asn

1 5 10 15

Cys Lys Ile Leu Asp Thr Ile Gly Arg Gly Thr Phe Ser Glu Val Gln
20 25 30

Asp His Met Leu Ile Gly Thr Gln Met Ala Ile Lys Ile Ile Pro Lys
35 40 45

Ala Gly Ser Leu Gly Ile Thr Leu Gln Arg Val Ile Ser Ile Leu Lys 60 55 50 Leu Leu Cys His Phe Asn Ile Val Arg Leu Tyr Gln Val Ile Asp Thr 70 75 80 65 Pro Asn Thr Ser Tyr Leu Phe Ser Asn Gly Val Cys Lys Arg Arg Thr 90 95 85 Pro Thr Gln Pro Ile His His His Gly Leu Met Arg Glu Glu Lys Ala 110 100 105

<210> 3420

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3420

Met Leu Thr Val Ala Leu Leu Ala Leu Leu Cys Ala Ser Ala Ser Gly

1 5 10 15

Asn Ala Ile Gln Ala Arg Ser Ser Ser Tyr Ser Gly Glu Tyr Gly Ser
20 25 30

Gly Gly Lys Arg Phe Ser His Ser Gly Asn Gln Leu Asp Gly Pro
35 40 45

Ile Thr Ala Leu Arg Val Arg Val Asn Thr Tyr Tyr Ile Val Gly Leu 50 55 60

Gln Val Arg Tyr Gly Lys Val Trp Ser Asp Tyr Val Gly Gly Arg Asn
65 70 75 80

Gly Asp Leu Glu Glu Ile Phe Leu His Pro Gly Glu Ser Val Ile Gln 85 90 95

Val Ser Gly Lys Tyr Lys Trp Tyr Leu Lys Lys Leu Val Phe Val Thr

100 105 110 Asp Lys Gly Arg Tyr Leu Ser Phe Gly Lys Asp Ser Gly Thr Ser Phe 120 125 115 Asn Ala Val Pro Leu His Pro Asn Thr Val Leu Arg Phe Ile Ser Gly 130 135 140 Arg Ser Gly Ser Leu Ile Asp Ala Ile Gly Leu His Trp Asp Val Tyr 160 150 155 145 Pro Thr Ser Cys Ser Arg Cys 165

<210> 3421

<211> 323

<212> PRT

<213> Homo sapiens

<400> 3421

Met Ile Gly Cys Leu His Ala Arg Val Ser Gly Pro Leu Trp Asp Ala

1 5 10 15

Gly Leu Cys Pro Ala Ser Ser Arg Ser Ala His Thr Cys Leu Ser Leu 20 25 30

Ser Val Ser Asp Ala Pro Val Ser Pro Ala Thr Ala Pro His Cys Leu 35 40 45

Leu Leu Ser Thr Ala Pro Ala Pro Pro Cys Pro Cys His Gly Val Leu 50 55 60

Asn Ser His Pro Phe Ser Pro Pro Phe Pro Gln Arg Pro Asp Gln Glu 65 70 75 80

Leu Thr Gly Ser Trp Gly His Gly Pro Arg Ser Thr Leu Val Arg Ala 85 90 95

Lys	Ala	Met	Ala	Pro	Pro	Pro	Pro	Pro	Leu	Ala	Ala	Ser	Thr	Pro	Leu
			100					105					110		
Leu	His	Gly	Glu	Phe	Gly	Ser	Tyr	Pro	Ala	Arg	Gly	Pro	Arg	Phe	Ala
		115					120					125			
Leu	Thr	Leu	Thr	Ser	Gln	Ala	Leu	His	Ile	Gln	Arg	Leu	Arg	Pro	Lys
	130					135					140				
Pro	Glu	Ala	Arg	Pro	Arg	Gly	Gly	Leu	Val	Pro	Leu	Ala	Glu	Val	Ser
145					150					155					160
Gly	Cys	Cys	Thr	Leu	Arg	Ser	Arg	Ser	Pro	Ser	Asp	Ser	Ala	Ala	Tyr
				165					170					175	
Phe	Cys	Ile	Tyr	Thr	Tyr	Pro	Arg	Gly	Arg	Arg	Gly	Ala	Arg	Arg	Arg
			180					185					190		
Ala	Thr	Arg	Thr	Phe	Arg	Ala	Asp	Gly	Ala	Ala	Thr	Tyr	Glu	Glu	Asn
		195					200					205			
Arg	Ala	Glu	Ala	Gln	Arg	Trp	Ala	Thr	Ala	Leu	Thr	Cys	Leu	Leu	Arg
	210					215					220				
Gly	Leu	Pro	Leu	Pro	Gly	Asp	Gly	Gly	Glu	Val	Leu	Gly	Ser	Cys	Ser
225					230					235					240
Ile	Leu	Glu	Pro	Pro	Trp	Cys	Leu	Cys	Arg	Ile	Ser	Ser	Ile	Gly	Ser
				245					250					255	
Cys	Val	Phe	Ile	Phe	Leu	Cys	Val	Trp	Val	Met	Tyr	Leu	Ser	Gly	Ser
			260					265					270		
Val	Arg	Ser	Asp	Thr	Gln	Gly	Trp	Ala	Thr	Glu	Gly	Thr	Lys	Arg	Gln
		275					280					285			
Glu	Asp	Arg	Met	Trp	Trp	Leu	Met	Ser	Val	Ile	Leu	Ala	Ile	Trp	Glu
	290					295					300				
Ala	Glu	Ala	Gly	Gly	Ser	Pro	Glu	Ile	Arg	Ser	Ser	Arg	Pro	Ala	Trp
305					310					315					320
Leu	Thr	Trp													

<210> 3422

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3422

Met Ser Val Val Pro Glu Lys Ser Gly Cys Leu Cys Leu Ala Ser Leu

1 5 10 15

His Thr Trp Ala Leu Thr Ser Arg Leu Leu Gly Ser Ser Ser Ser Val

20 25 30

Ser Arg Ala Ala Val Leu Leu Leu Leu Val Phe Pro His Phe Pro Pro

35 40 45

Gly Lys Glu Arg Leu Pro Asn Ala Gly Met Glu Tyr Lys Gln Asn Val

50 55 60

Met Gly Ser Ala Val Thr Pro Pro Pro Glu Ala Glu Ala Val Leu Leu

65 70 75 80

Glu Asp Arg Arg His His Arg Val Phe Pro Leu Pro Leu Pro Leu

85 90 95

Leu Arg Asn Val Ser Ile Pro Ile Gly

100 105

<210> 3423

<211> 133

<212> PRT

<213> Homo sapiens

<400> 3423

Met Val Lys Gly Gly Ser Ser Ile Ile Ser Pro Asp Thr Asn Leu Leu

5 10 15 1

Asn Ile Lys Gly Ser His Ser Lys Ser Lys Asn Ser His Phe Phe Phe

25 20 30

45

Ser Asn Thr Val Lys Ile Thr Ala Phe Ser Lys Lys Asn Glu Asn Ile 35 40

Phe Asn Cys Asp Leu Ile Asp Ser Val Asp Gln Ile Lys Asn Met Pro 50 60 55

Cys Leu Asp Leu Arg Glu Phe Gly Lys Asp Val Lys Pro Trp His Val 65 70 75 80

Glu Thr Thr Glu Ala Ala Arg Asn Asn Glu Asn Thr Gly Phe Asp Ala 85 90 95

Leu Ser His Glu Cys Thr Ala Lys Pro Leu Phe Pro Arg Val Glu Val 100 105 110

Gln Ser Glu Gln Leu Thr Val Glu Glu His Ile Lys Arg Asn Arg Cys 115 120 125

Tyr Ser Asp Thr Glu

130

<210> 3424

<211> 139

<212> PRT

<213> Homo sapiens

<400> 3424

Met Ser Ile Arg Ser Asp Lys Ile Lys Asp Ile Asn Leu Met Phe Pro

Trp Pro Ala Leu Arg Cys Ala Gly Thr Asn Arg Leu Tyr Leu Leu Tyr Phe Phe Pro Phe Phe Leu Lys Arg Ser Leu Ala Gln Ser Pro Arg Leu Glu Gly Ser Gly Ala Ile Ser Ala His Cys Arg Leu Arg Leu Pro Gly Ser Arg Arg Ser Pro Ala Ser Ala Ser Arg Ile Ala Gly Thr Thr Gly Ala Arg His Tyr Ala Arg Leu Ile Phe Cys Val Phe Leu Val Glu Ala Gly Phe His His Val Gly Leu Glu Leu Leu Thr Ser Gly Asp Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His Cys Val Arg Pro Leu Tyr Phe Phe Glu Leu Gln Thr <210> 3425 <211> 452 <212> PRT <213> Homo sapiens <400> 3425 Met Pro Trp Gly Lys Asn Ser Ser Pro His Trp Gly His His Leu Gly

Cys Leu Pro Ser Ala Pro Ala Cys Arg Ile Trp Arg Pro His Ser Arg

Pro	Ala	Trp	Glu	Pro	Pro	Arg	Pro	Ser	Pro	Leu	Leu	Cys	Gln	Asp	Met
		35					40					45			
Ala	Leu	Gln	Asn	Ala	Leu	Tyr	Thr	Gly	Asp	Leu	Ala	Arg	Leu	Gln	Glu
	50					55					60				
Leu	Phe	Pro	Pro	His	Ser	Thr	Ala	Asp	Leu	Leu	Leu	Glu	Ser	Arg	Ala
65					70					75					80
Ala	Glu	Pro	Arg	Trp	Ser	Ser	His	Gln	Arg	Gly	Leu	Trp	Ser	Leu	Thr
				85					90					95	
Tyr	Glu	Glu	Glu	Leu	Thr	Thr	Pro	Leu	His	Val	Ala	Ala	Ser	Arg	Gly
			100					105					110		
His	Thr	Glu	Val	Leu	Arg	Leu	Leu	Leu	Arg	Arg	Arg	Ala	Arg	Pro	Asp
		115					120					125			
Ser	Ala	Pro	Gly	Gly	Arg	Thr	Ala	Leu	His	Glu	Ala	Cys	Ala	Ala	Gly
	130					135					140				
His	Thr	Ala	Cys	Val	His	Val	Leu	Leu	Val	Ala	Gly	Ala	Asp	Pro	Asn
145					150					155					160
Ile	Ala	Asp	Gln	Asp	Gly	Lys	Arg	Pro	Leu	His	Leu	Cys	Arg	Gly	Pro
				165					170					175	
Gly	Thr	Leu	Glu	Cys	Ala	Glu	Leu	Leu	Leu	Arg	Phe	Gly	Ala	Arg	Val
			180					185					190		
Asp	Gly	Arg	Ser	Glu	Glu	Glu	Glu	Glu	Thr	Pro	Leu	His	Val	Ala	Ala
		195					200					205			
Arg	Leu	Gly	His	Val	Glu	Leu	Ala	Asp	Leu	Leu	Leu	Arg	Arg	Gly	Ala
	210					215					220				
Cys	Pro	Asp	Ala	Arg	Asn	Ala	Glu	Gly	Trp	Thr	Pro	Leu	Leu	Ala	Ala
225					230					235					240
Cys	Asp	Val	Arg	Cys	Gln	Ser	Ile	Thr	Asp	Ala	Glu	Ala	Thr	Thr	Ala
				245					250					255	
Arg	Cys	Leu	Gln	Leu	Cys	Ser	Leu	Leu	Leu	Ser	Ala	Gly	Ala	Asp	Ala

Asp Ala Ala Asp Gln Asp Lys Gln Arg Pro Leu His Leu Ala Cys Arg Arg Gly His Ala Ala Val Val Glu Leu Leu Leu Ser Cys Gly Val Ser Ala Asn Thr Met Asp Tyr Gly Gly His Thr Pro Leu His Cys Ala Leu Gln Gly Pro Ala Ala Ala Leu Ala Gln Ser Pro Glu His Val Val Arg Ala Leu Leu Asn His Gly Ala Val Arg Val Trp Pro Gly Ala Leu Pro Lys Val Leu Glu Arg Trp Ser Thr Cys Pro Arg Thr Ile Glu Val Leu Met Asn Thr Tyr Ser Val Val Gln Leu Pro Glu Glu Ala Val Gly Leu Val Thr Pro Glu Thr Leu Gln Lys His Gln Arg Phe Tyr Ser Ser Leu Phe Ala Leu Val Arg Arg Pro Arg Ser Leu Gln His Leu Ser Arg Cys Ala Pro Arg Ser His Leu Glu Gly Ser Leu Pro Gln Ala Leu Pro Arg Leu Pro Leu Pro Pro Arg Leu Leu Arg Tyr Leu Gln Leu Asp Phe Glu Gly Val Leu Tyr

<210> 3426

<211> 398

<212> PRT

<213> Homo sapiens

<400> 3426

Met Val Thr Leu Ile Thr Glu Lys Leu Gln Ser Gln Ser Leu Asp Asp 1 5 10 15

Leu Thr Cys Lys Ala Glu Ala Gly Pro Leu Gln Tyr Ser Ala Glu Thr
20 25 30

Leu Asn Lys Ser Gly Arg Leu Phe Pro Leu Glu Leu Asn Asp Gln Ser

35 40 45

Pro Trp Lys Val Phe Ser Gly Gly Pro Pro Val Arg Ser Gln Ala Ala 50 55 60

Thr Gly Pro Asp Phe Ser Phe Leu Pro Gly Leu Ser Ala Ala Ala His
65 70 75 80

Thr Met Gly Leu Gln Trp Gln Pro Gln Ser Pro Arg Pro Gly Val Gly
85 90 95

Leu Gly Ala Ala Ser Thr Val Asp Pro Ser Glu Ser Thr Gly Ser Ser

100 105 110

Thr Ala Pro Pro Thr Lys Arg His Cys Arg Ser Leu Ser Glu Pro Glu
115 120 125

Glu Leu Val Arg Cys Arg Ser Pro Trp Arg Pro Gly Ser Ser Lys Val 130 135 140

Trp Thr Pro Val Ser Lys Arg Arg Cys Asp Ser Gly Gly Ser Ala Thr
145 150 155 160

Arg Gln Gly Ser Pro Gly Ala Val Leu Pro Arg Ser Ala Val Trp Ser 165 170 175

Thr Gly Pro Thr Ser Pro Ala Thr Pro Arg Pro Ser Ser Ala Ser Gly
180 185 190

Gly Phe Val Asp Ser Ser Glu Gly Ser Ala Gly Ser Gly Pro Leu Trp

		195					200					205			
Cys	Ser	Ala	Glu	Ser	Cys	Leu	Pro	Ser	Thr	Arg	Arg	Arg	Pro	Ser	Leu
	210					215					220				
Ser	Gln	Glu	Arg	Leu	Ala	Gly	Ala	Gly	Thr	Pro	Leu	Pro	Trp	Ala	Ser
225					230					235					240
Ser	Ser	Pro	Thr	Ser	Thr	Pro	Ala	Leu	Gly	Gly	Arg	Arg	Gly	Leu	Leu
				245					250					255	
Arg	Cys	Arg	Ser	Gln	Pro	Cys	Val	Leu	Ser	Gly	Lys	Arg	Ser	Arg	Arg
			260					265					270		
Lys	Arg	Arg	Arg	Glu	Glu	Asp	Ala	Arg	Trp	Thr	Arg	Pro	Ser	Leu	Asp
		275					280					285			
Phe	Leu	Lys	Met	Thr	Gln	Thr	Leu	Lys	Asn	Ser	Lys	Ser	Leu	Cys	Ser
	290					295					300				
Leu	Asn	Tyr	Glu	Asp	Asp	Asp	Glu	Asp	Asp	Thr	Pro	Val	Lys	Thr	Val
305					310					315					320
Leu	Ser	Ser	Pro	Cys	Asp	Ser	Arg	Gly	Leu	Pro	Gly	Ile	Thr	Met	Pro
				325					330					335	
Gly	Cys	Ser	Gln	Arg	Gly	Leu	Arg	Thr	Ser	Pro	Val	His	Pro	Asn	Leu
			340					345					350		
Trp	Ala	Ser	Arg	Glu	Ser	Val	Thr	Ser	Asp	Gly	Ser	Arg	Arg	Ser	Ser
		355					360					365			
Gly	Asp	Pro	Arg	Asp	Gly	Asp	Ser	Val	Gly	Glu	Glu	Gly	Val	Phe	Pro
	370					375					380				
Arg	Ala	Arg	Trp	Glu	Leu	Asp	Leu	Glu	Gln	Ile	Glu	Asn	Asn		
385					390					395					

<210> 3427

<211> 119

<212> PRT

<213> Homo sapiens

<400> 3427

Met Pro Ala Pro Met Val Val Ser Gly Lys Ala His Ser Ser Ser Val

1 5 10 15

Thr Phe Pro Phe Ser Ile His Leu Arg Leu His Ala Leu Gln Leu Leu

20 25 30

Gly Leu Cys Ser Cys His Ile Glu Glu Gly Gly Trp Ala Arg His Gly

35 40 45

Ile Ile Leu Arg Ser Leu Leu His Gln Leu Leu Gly Thr Met Glu Tyr

50 55 60

Pro Arg Val Val Thr Ala Asp Gly Ala Thr Trp Gly Arg Ala Gln Val

65 70 75 80

Gly Gln Ala Thr Ala Gly Val Met Ala Cys Glu Pro Gln Ala Thr Ser

85 90 95

Gly Thr Phe Pro Thr Ala Ser Met Gln Gly Cys Arg Ala Met Val Pro

100 105 110

Phe Ser Thr Ala Leu Glu Leu

115

<210> 3428

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3428

Met Asp Gln Ser Arg Gly Arg Gly Thr Ala Leu Glu Pro Ile Gly Gly

Leu Arg Met Ala Ser Leu Ser Gly Lys Asp Phe His Pro Asp Ser Phe Arg Pro Gln Pro Gln Pro Ser Arg Arg Trp Ala Gly Leu Glu Glu Arg Ser Ser Glu Arg Thr Ile Asn Leu Ser Val Leu His Phe Tyr Pro Ser Pro Gln Glu Ser Pro Ser Leu Pro Ser Ala Val Arg Pro Phe Pro Gly Ala Arg Gly Val Arg Ser Arg Ala Leu Met Gly Val Asn Cys Ser Leu Asp Ser Val Lys Leu Ala Cys Trp Leu Gly Val Phe Pro Ile Trp Gly Glu Ser Pro Leu Thr Asn Ser Pro Lys Ala Ile His Arg Ala Phe Tyr Ser Pro Thr Ser Thr Gln Leu Leu Tyr Arg Gln Arg Gln Arg Gln Thr His Thr His Ser

<210> 3429

<211> 223

<212> PRT

<213> Homo sapiens

<400> 3429

Met Arg Pro Leu Gly Lys Gly Leu Leu Pro Ala Glu Glu Leu Ile Arg

1 5 10 15

Ser	Asn	Leu	Gly	Val	Gly	Arg	Ser	Leu	Arg	Asp	Cys	Leu	Ser	Gln	Ser
			20					25					30		
Gly	Lys	Leu	Ala	Glu	Glu	Leu	Gly	Ser	Lys	Arg	Leu	Lys	Pro	Ala	Lys
		35					40					45			
Phe	Gly	Thr	Glu	Gly	Lys	Glu	Arg	Val	Glu	Gln	Arg	Thr	Glu	Arg	Gln
	50					55					60				
Arg	Thr	Gly	Ser	Ser	Lys	Glu	Pro	Arg	Met	Gln	Ile	Ile	Cys	Arg	Arg
65					70					75					80
Arg	Trp	Arg	Glu	Pro	Pro	Pro	Arg	Leu	Leu	Trp	Gly	Cys	Leu	Met	Pro
				85					90					95	
Arg	Ala	Gln	Pro	Leu	Leu	His	Val	Thr	Ala	Tyr	Glu	Asn	Thr	Gly	His
			100					105					110		
Trp	Glu	Arg	Leu	Ala	Ser	Val	Val	Ser	Ser	Lys	Thr	Gln	Gln	Pro	Thr
		115					120					125			
Val	Ile	Ser	His	Ser	Ser	Ile	Ser	Ile	Thr	Phe	Ser	His	Tyr	Pro	Pro
	130					135					140				
Ala	Thr	Leu	Asp	Ser	Phe	Leu	Val	Leu	Glu	Pro	Ile	Lys	Leu	Phe	Pro
145					150					155					160
Val	Ser	Ser	Leu	Arg	Ser	Pro	Leu	Cys	Leu	Asn	Cys	Gly	Ser	Cys	Arg
				165					170					175	
Glu	Ser	Ile	Arg	Ile	Ser	Gly	Glu	Leu	Ile	Gly	Asn	Ala	His	Ser	Pro
			180					185					190		
Ala	Pro	Pro	Arg	Thr	Pro	Glu	Leu	Glu	Thr	Leu	Gly	Trp	Asp	Lys	Gln
		195					200					205			
Ala	Val	Leu	Ser	Gly	Ala	Gln	Val	Ile	Leu	Val	Cys	Ala	Glu	Val	
	210					215					220				

<211> 132

<212> PRT

<213> Homo sapiens

<400> 3430

Met Val Thr Leu Met Gly Val Trp Leu Gly Pro Trp Gly Arg Gly Met

1 5 10 15

Ala Ala Pro Pro Thr Glu Gly Ala Ala Val Thr Pro Ala Ser Ser Pro

20 25 30

Gly Pro Gln Ala Ser Leu Ala Trp Arg Ser Ser Gly Ser Arg Pro Cys

35 40 45

Cys Pro Leu Thr Ala Ser Leu Thr Ser Pro Trp Arg Asn Gln Pro Leu

50 55 60

His Thr Ala Pro Ser Gly Gly Gly Cys Cys Val Thr Gly Pro Ala Cys

65 70 75 80

Ser Ile Ala Trp Ala Gly Arg Ser Pro Pro Ser Arg Trp Ile Phe Gln

85 90 95

Arg Gly Leu Thr Ala Thr Ser Thr Leu Pro Gly Ser Cys Trp Lys Gly

100 105 110

Arg Ser Ser Ala Ser Trp Pro His Thr Gly Ala Val Cys Cys Pro Ala

115 120 125

Pro Ala Pro Cys

130

<210> 3431

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3431

Met Glu Gln Asp Asn Ser Pro Arg Lys Ile Gln Phe Thr Val Pro Leu

1 5 10 15

Leu Glu Pro His Leu Asp Pro Glu Ala Ala Glu Gln Ile Arg Arg

20 25 30

Arg Pro Thr Pro Ala Thr Leu Val Leu Thr Ser Asp Gln Ser Ser Pro

35 40 45

Glu Ile Asp Glu Asp Arg Ile Pro Asn Pro His Leu Lys Lys Leu Gln

50 55 60

Asn Ala Ser Leu Lys Leu Thr Arg Glu Ala Val Arg Asn Pro Ala Gln

65 70 75 80

Lys Asn Pro Gln Pro Ile Tyr His His Trp Ile Pro Arg Glu Pro Thr

85 90 95

Arg Ser Glu Arg Arg Gly Gly Thr Gly Gly Gln Lys Ser Val Gly Gly

100 105 110

Phe Pro Cys Ser Thr His Thr Leu Ala Pro Phe Tyr Val Phe Thr Arg

115 120 125

Ser Ile Leu Leu Lys Arg Gly Glu Arg Met Ser His Pro Leu Glu

130 135 140

Pro Arg Asp Asp Pro Thr Lys Met Pro

145 150

<210> 3432

<211> 387

<212> PRT

<213> Homo sapiens

400	2 4 2 6
<400>	- 3/1 3/2
ヘサリソノ	.,4.)/

Met Ser Ser Pro Pro Ala Leu Arg Asp Ser Pro Val Cys Pro Arg Tyr 1 5 10 15 Ser Pro Thr Thr Pro Thr Phe Gln Leu Glu Ser Leu Ala Gly Thr Gln 20 25 30 Glu Leu Pro Thr Asn Ser Ala Val Ala Leu Ser Tyr Ser Pro Val Ser 35 40 45 Leu Met Ser Ser Pro Pro Ala Pro Trp Asp Ser Pro Val Cys Pro Ser 50 55 60 Ser Ser Pro Thr Thr Pro Arg Phe Gln Arg Glu Ser Ala Ser His Thr 70 65 75 80 Pro Glu Ser Pro Thr Asp Ser Gln Thr Ser Arg Arg Ser Ser Leu Val 85 90 95 Ser Leu Arg Ser Leu Pro Ser Ala His Arg Asp Ser Cys Val Ser Phe 100 105 110

Ser Tyr Ser Arg Asn Phe Ser Arg Phe Gln Leu Asp Ser Val Pro Gly
115
120
125
Thr His Asp Thr Pro Pro Asn Ser Arg Ile Ser Leu Thr Tyr Ser Pro

130 135 140

Val Ser Leu Met Phe Ser Pro Pro Ala Leu Arg Asp Ser Ser Val Ser 145 150 155 160

Leu Ser Tyr Ser Pro Ala Ile Ser Thr Ser His Leu Gly Ser Ala Ser

165 170 175

His Thr Gln Glu Ser Pro Thr Asn Ser Arg Thr Leu Leu Gln Pro Ser 180 185 190

Pro Ile Ser Phe Thr Ser Ser Pro Pro Ala Phe Arg Asp Ser Pro Val 195 200 205

Ser Pro Ser Phe Ser Pro Ala Phe Pro Arg Phe Leu Pro Gln Ser Ala 210 215 220

Pro	Gly	Thr	Gln	Gly	Tyr	Pro	Gly	His	Ser	Gln	Ala	Ser	Arg	Asp	Tyr
225				-	$\bar{2}30$					235					240
Phe	Pro	Met	Thr	Cys	Ile	Tyr	Arg	Gly	Met	Ala	Pro	Ile	Leu	Pro	Ser
				245					250					255	
Val	Thr	Ser	Asn	Pro	Ser	Pro	Leu	Thr	Leu	Arg	His	Ser	Gln	Gly	Leu
			260					265					270		
Thr	Ala	Thr	Pro	Arg	Tyr	Cys	Pro	Ser	Ala	Arg	Ser	Pro	Gly	Pro	Ser
		275					280					285			
Thr	Ser	Gln	His	Asp	Ala	Ala	Thr	Trp	Pro	Cys	Leu	His	Ile	Ser	Gly
	290					295					300				
Glu	Gly	Pro	Thr	Pro	Ser	Arg	Arg	Arg	Ala	Pro	Pro	Ala	Phe	Arg	Pro
305					310					315					320
His	Thr	Gln	Ala	Cys	Pro	Ser	Thr	Cys	Tyr	Cys	His	Pro	Leu	Ala	Ser
				325					330					335	
Arg	Arg	Gly	Pro	Cys	Asn	Gly	Arg	Tyr	His	Arg	Pro	Val	Tyr	Pro	His
			340					345					350		
Pro	Thr	Ala	Val	Gln	Arg	Asp	Pro	Pro	Ala	Gly	Pro	Arg	Gly	Cys	His
		355					360					365			
Ser	Pro	Cys	Trp	His	Asp	Ala	Pro	Ala	Cys	Arg	Arg	Pro	Cys	Gly	Pro
	370					375					380				
Arg	Tyr	Arg													

<210> 3433

385

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3433 Met Pro Gly Glu Pro Pro Leu Gly Lys Met Phe Gly Arg Gly Ser Lys 5 10 1 15 Gly Ser Thr Glu Asp Gly Leu Glu Leu Arg Gly Ile His Phe Met Val 20 25 30 Lys Lys Pro Phe Leu Lys Glu Ser Ser Thr Gln Glu Thr Pro Pro Thr 35 40 45 His Ala Ser Leu Pro Pro Lys Thr Arg Leu Cys Leu Ser His Thr Phe 50 55 60 Tyr Val Leu Tyr Ile Lys Asn Pro Leu Glu Phe Ser Lys Leu Gly Ile 70 75 80 65 Val Val Cys Asp Ala Tyr Leu Lys Arg Gly Glu Arg Val Gly His Gly 85 95 90 Gly Ser Arg Leu 100

<210> 3434

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3434

Met Gln Ala Leu Ser Lys Leu Gly Ser Leu Ser Gln Leu Asp Trp Gly

1 5 10 15

Pro Arg Pro Gly Ser Gly Ala Ala Gly Ala Trp Ala Trp Gly Leu Ala
20 25 30

Val Ala His Gly Leu Ser Ser Gly Leu Gly Trp Arg Arg Cys Ser Leu 35 40 45

Ala Ala Cys Ala Val Leu Glu Leu Thr Trp Gly Lys Ala Gly Leu Ala Gly Leu Gly Arg Ala Arg Leu Trp Pro Arg Pro Leu Gly Arg Leu Arg Arg Glu Gln Arg Leu Ser Pro Gly Ala Leu Arg Cys Ile Cys Ala Arg Ser Val Ala Arg Cys Leu <210> 3435 <211> 125 <212> PRT <213> Homo sapiens <400> 3435 Met Ser Ser Gln Cys Leu Glu Thr Arg Thr Val Ile Tyr Arg Ser Ile Phe Leu Val Phe Leu Lys Val Ser Phe His Asn Thr Arg Ser Ser Leu Pro Leu Val Ser Trp Arg Val His Pro Thr Asp Glu Ser Ser Phe Pro Val Gly Leu Ser His Leu Gly Asn Ser Leu Arg Ser Thr Tyr Gln Pro Arg Lys Lys Leu Pro Gly Tyr Leu Leu Pro Thr Cys Pro Gly Leu Ile Asn Thr Lys Gly Gly Lys Leu Lys Gly Ala Ala Asn Trp Ser Thr Trp

Lys Gly Gly Ser Thr Leu Asp Trp Cys Leu Ser Phe Ser Ser Phe Phe

100 105 110

Leu Lys Lys Ile Tyr Phe Leu Asn Asn Asn Lys Cys Thr
115 120 125

<210> 3436

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3436

Met Asp Gly Gln Thr Glu Arg Ala Ala Asn Gln Gln Ala Ser Ser Ser

1 5 10 15

Gln Ala Ser His Leu Trp Pro Cys Ile Phe Leu Ser Val Gly Gln Arg

20 25 30

Tyr Lys Glu Ile Arg Gln Lys Tyr Arg Arg Trp Ser Phe Ala Leu Ser

35 40 45

Pro Arg Leu Glu Gly Asn Asp Thr Thr Ile Ala His Trp Ser Leu Glu

50 55 60

Leu Leu Gly Ser His Asp Pro Pro Thr Ser Ala Ser Gln Val Ala Gly

65 70 75 80

Thr Thr Ala Thr His His Cys Gly Gly Leu Thr Gly Gly Val Arg Thr

85 90 95

Glu Val Asn Ser Leu

100

<210> 3437

<211> 101

<212> PRT <213> Homo sapiens

<400> 3437

Met Thr Pro Pro Pro Lys Thr His Thr His Thr Val Val Ser Tyr His

1 5 10 15

Ser Arg Trp Ala Met Cys Lys Asp Ser Arg Asp Gln Glu Cys Arg Trp
20 25 30

Pro Gln Gln Gly Trp Leu Ser Phe Pro Cys Ser Phe Thr Ser Gly Thr
35 40 45

Ser Ala Gly Lys Gly Leu Ser Ser Trp Asn His Ala Pro Val Ile Gly 50 55 60

Ala Ala Ile Thr Trp Gln Leu Gly Leu Ser Ala Gly Met His Thr Gly
65 70 75 80

Ala Leu Leu Cys Gly Val Ala Ser Ser Ala Cys Leu Asp Phe Phe Tyr

85 90 95

Gly Gly Pro Glu Ile 100

<210> 3438

<211> 253

<212> PRT

<213> Homo sapiens

<400> 3438

Met Leu Ile Leu Gly Ser Met Phe Ser Leu Val Glu Pro Val Leu Thr

1 5 10 15

Ile Ala Ala Leu Ser Val Gln Ser Pro Phe Thr Arg Ser Ala Gln

			20					25					30		
Ser	Ser	Pro	Glu	Cys	Ala	Ala	Ala	Arg	Arg	Pro	Leu	Glu	Ser	Asp	Gln
		35					40					45			
Gly	Asp	Pro	Phe	Thr	Leu	Phe	Asn	Val	Phe	Asn	Ala	Trp	Val	Gln	Val
	50					55					60				
Lys	Ser	Glu	Arg	Ser	Arg	Asn	Ser	Arg	Lys	Trp	Cys	Arg	Arg	Arg	Gly
65					70					75					80
Ile	Glu	Glu	His	Arg	Leu	Tyr	Glu	Met	Ala	Asn	Leu	Arg	Arg	Gln	Phe
				85					90					95	
Lys	Glu	Leu	Leu	Glu	Asp	His	Gly	Leu	Leu	Ala	Gly	Ala	Gln	Ala	Ala
			100					105					110		
Gln	Val	Gly	Asp	Ser	Tyr	Ser	Arg	Leu	Gln	Gln	Arg	Arg	Glu	Arg	Arg
		115					120					125			
Ala	Leu	His	Gln	Leu	Arg	Arg	Gln	His	Glu	Glu	Gly	Ala	Gly	Arg	Arg
	130					135					140				
Arg	Lys	Val	Leu	Arg	Leu	Gln	Glu	Glu	Gln	Asp	Gly	Gly	Ser	Ser	Asp
145					150					155					160
Glu	Asp	Arg	Ala	Gly	Pro	Ala	Pro	Pro	Gly	Ala	Ser	Asp	Gly	Val	Asp
				165					170					175	
Ile	Gln	Asp	Val	Lys	Phe	Lys	Leu	Arg	His	Asp	Leu	Ala	Gln	Leu	Glņ
			180					185					190		
Ala	Ala	Ala	Ser	Ser	Ala	Gln	Asp	Leu	Ser	Arg	Glu	Gln	Leu	Ala	Leu
		195					200					205			
Leu	Lys	Leu	Val	Leu	Gly	Arg	Gly	Leu	Tyr	Pro	Gln	Leu	Ala	Val	Pro
	210					215					220				
Asp	Ala	Phe	Asn	Ser	Ser	Arg	Lys	Asp	Ser	Asp	Gln	Val	Gly	Pro	Val
225					230					235					240
Leu	Pro	His	Pro	Met	Phe	Cys	Pro	Pro	Thr	His	Glu	Pro			
				245					250						

<210> 3439 <211> 180 <212> PRT <213> Homo sapiens <400> 3439 Met Ala Gln Pro Pro Val Thr Leu Leu Cys Ile Cys Ser Glu Val Leu Val Arg Ala Ala Asp Ser Ile Trp Lys Trp Thr Leu Ser Gly Pro Gly Pro Gly Ser Val Trp Pro Ser Thr Gly Glu Ala Gly Leu Arg Arg Gly Leu Arg Ala Glu Ala Pro Leu Gln Gln Leu Gln Glu Gly Pro Ala Pro Gly Glu Glu Cys Leu Gly Arg Ala Trp Gly Leu Arg Val Arg Arg Arg Gly Pro Leu Pro Pro Leu Pro Trp Gly Ser Glu Arg Pro Pro Cys Cys Leu Glu Gly Ala Trp Gln Leu Glu Trp Glu Gln Arg Pro Gln Gly Gly Arg Ala Gly Gly Arg Gly Pro Ala Ala Cys Pro Val Pro Arg Lys Val Thr Ala Cys Phe Glu Ser Ala Ala Lys Lys Ser Val Gly Gln Phe Arg Gln Leu Ser Pro Glu Leu Pro Arg Glu Thr His Pro Ala Cys Pro Ala

Leu Pro Thr Gly Ser Arg Arg Thr Glu Gly Thr Gln Leu Gly Ala Arg

165 170 175

Arg Pro Gly Leu

180

<210> 3440

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3440

Met Pro Ser Phe Thr His Ser Pro Pro Glu His Ser Val Ser Pro Met

1 5 10 15

Val Arg Ala Arg Leu Leu Arg Met Ala Phe Lys Ala Ser Val Pro Ser

20 25 30

Pro Arg Pro Ala Ile Leu Gln Arg Val Arg Ser Ala Ser Pro Gly Pro

35 40 45

Leu Pro Val Leu Leu Cys Glu Ala Pro Cys Pro His Leu Phe Thr Cys

50 55 60

Gln Pro Leu His Phe Leu Arg Val Leu Thr Leu Val Ser Trp Leu Pro

65 70 75 80

Phe Tyr Phe Lys Glu Pro Pro Val Tyr Leu Pro Pro Ser Val Ser Leu

85 90 95

Ile Leu Leu Ala Leu Ser Phe Phe Cys Ile Ile Tyr Tyr Leu Ile Thr

100 105 110

Tyr Lys Lys Met Tyr Thr Leu Met Cys Thr Val Ser Asn Cys

115 120 125

<210> 3441

<211> 121

<212> PRT

<213> Homo sapiens

<400> 3441

Met Pro Val Thr Pro Ala Leu Trp Glu Ala Glu Ala Gly Gly Ser Leu

1 5 10 15

Glu Leu Arg Ser Ser Gly Pro Ala Leu Asp Lys Met Val Arg Pro Cys

20 25 30

Leu Cys Gln Lys Asn Thr Glu Val Ser Gln Ala Trp Cys Ser Val Pro

35 40 45

Val Val Ala Ala Thr Gly Glu Ala Glu Val Gly Gly Ser Leu Asp Pro

50 55 60

Arg Arg Ser Gly Leu Gln Trp Ala Val Ile Val Pro Leu His Pro Ser

65 70 75 80

Leu Gly Asp Arg Val Arg Pro Cys Leu Lys Lys Arg Lys Val Lys Ala

85 90 95

Thr Arg Gly Gly Ser Cys Leu Trp Phe Gln His Phe Gly Arg Pro Arg

100 105 110

Arg Val Asp His Leu Arg Trp Gly Val

115 120

<210> 3442

<211> 322

<212> PRT

<213> Homo sapiens

<400> 3442 Met Arg Pro Lys Pro Pro Ser Arg Ala Gly Val Leu Gln Ile Ala Gln Glu Leu His Arg Lys Ala Glu Gln Thr Pro Pro Arg Pro Arg Pro Arg Ser Leu Thr Val Ala Arg Gly Ser Val Gly His Thr Glu Glu Arg Gly Gly Val Ala Ala Glu Leu Arg Lys Arg Leu Val Arg Gly Gly Ala Arg Arg Gly Ser Arg Asp Gly Gly Arg Gly Arg Gly Gly Gly Val Ala Gly Gln Arg Ser Gln Glu Gly Trp Gly Ser Gly Arg Arg Ala Arg Val Thr Gly Arg Gly Ser Trp Gly Arg Gly Pro Gly Val Ala Ala Arg Gly Val Gly Ala Ala Gly Arg Asp Thr Gly Gly Pro Arg Ala Leu Gly Gly Gly Cys Lys Ala Trp Ile Thr Leu Met Ser Gly Glu Thr Cys Thr Gly Gly Thr Ile Leu Ser Pro Thr Ser Ala Pro Glu Ala Gln Pro Ala Asp Gly Ala Gly Cys Arg Thr Ser Gln Gln Ser Leu Gly Gly Lys Gly Gly Ala Gly Arg Thr His Ala Pro Ser Ala Ala Arg Glu Arg Gly Ala Ala Pro Pro Gly Asp Arg Arg Val Thr Ala Arg Pro Arg Ala Ala Val Thr

Ser Arg Glu Ala His Ala His Lys Gly Trp Gly Val Arg Gly Gly Ser

Ser Ala Ala Pro Ala Gln Leu Leu Arg Glu Ala Gly Ser Ala Pro Ser 230 240 225 235 Gly Arg Gly Val Ser Phe Pro Arg Arg Ala Gly Gly Pro Leu Phe Pro 250 245 255 Arg Ala Ala Ala Glu Ala Pro Pro Ser Ala Ser Trp Pro Cys Val His 265 270 260 Thr Pro Asp Cys Gly Pro Gly Arg Thr Leu Ser Ser Cys Ala Glu Arg 275 280 285 Arg Arg Pro Glu Val Arg Ala Ala Arg Ala Gly Pro Ala Pro Arg Thr 290 295 300 Ala Pro Thr Arg Gly Trp Pro Gly Gln Gly Pro Gly Gly Pro Gly Ser 305 310 315 320 Gly Val

<210> 3443

<211> 267

<212> PRT

<213> Homo sapiens

<400> 3443

Met Lys Ala Glu Ala Thr Val Ile Pro Ser Arg Cys Ala Arg Gly Leu

1 5 10 15

Pro Ser Trp Gln Val Leu Ser Pro Val Gln Pro Trp Gln Thr Ser Ala

20 25 30

Pro Gln Asn Thr Thr Gln Pro Lys Leu Leu Ala Pro His Gln His Asp

35 40 45

Lys Ser Gln Lys Lys Ser Ser Leu Leu Lys Glu Leu Gly Ala Phe His

	50					55					60				
Ile	Thr	Ile	Ala	Leu	Leu	His	Leu	Val	Phe	Gly	Gly	Tyr	Leu	Ala	Ser
65					70					75					80
Ile	Val	Lys	Asn	Leu	His	Leu	Val	Val	Leu	Lys	Ser	Trp	Tyr	Pro	Phe
				85					90					95	
Trp	Gly	Ala	Ala	Ser	Phe	Leu	Ile	Ser	Gly	Ile	Leu	Ala	Ile	Thr	Met
			100					105					110		
Lys	Thr	Phe	Ser	Lys	Thr	Tyr	Leu	Lys	Met	Leu	Cys	Leu	Met	Thr	Asn
		115					120					125			
Leu	Ile	Ser	Leu	Phe	Cys	Val	Leu	Ser	Gly	Leu	Phe	Val	Ile	Ser	Lys
	130					135					140				
Asp	Leu	Phe	Leu	Glu	Ser	Pro	Phe	Glu	Ser	Pro	Ile	Trp	Arg	Met	Tyr
145					150					155					160
Pro	Asn	Ser	Thr	Val	His	Ile	Gln	Arg	Leu	Glu	Leu	Ala	Leu	Leu	Cys
				165					170					175	
Phe	Thr	Val	Leu	Glu	Leu	Phe	Leu	Pro	Val	Pro	Thr	Ala	Val	Thr	Ala
			180					185					190		
Trp	Arg	Gly	Asp	Cys	Pro	Ser	Ala	Lys	Asn	Asp	Asp	Ala	Cys	Leu	Val
		195					200					205			
Pro	Asn	Thr	Pro	Leu	His	Leu	Lys	Gly	Leu	Pro	Val	Glu	Pro	Pro	Pro
	210					215					220				
Ser	Tyr	Gln	Ser	Val	Ile	Gln	Gly	Asp	Ala	Gln	His	Lys	Gln	His	Gln
225					230					235					240
Arg	Leu	Arg	Glu	Val	Lys	Gln	Val	Ala	Pro	Asp	Thr	Trp	Ile	Val	Thr
				245					250					255	
Asp	Gly	Ala	Ala	Ile	Trp	Ala	Gln	Thr	Ala	Asn					
			260					265							

<210> 3444

<211> 497

<212> PRT

<213> Homo sapiens

<400> 3444

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Ile Ile Lys Gly

1 . 5 . 10 . 15

Val Gln Cys Gln Val Gln Leu Val Glu Ser Gly Gly Asp Leu Val Thr
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
35 40 45

Gly Asp Phe Tyr Met Thr Trp Leu Arg Gln Val Pro Gly Lys Asp Leu 50 55 60

Glu Trp Leu Ala Tyr Ile Ser Ser Asn Gly Gly Tyr Ser Glu Tyr Ala
65 70 75 80

Asp Ser Val Arg Gly Arg Phe Thr Ile Ser Arg Asp Asn Val Lys Asn 85 90 95

Ser Leu His Leu Gln Met Asn Ser Leu Arg Ala Gln Asp Thr Ala Ile
100 105 110

Tyr Tyr Cys Ala Arg Phe Thr Val Ser Met Asp Thr Val Ala Tyr Ser

115 120 125

Tyr Gly Leu Asp Val Trp Gly Pro Gly Thr Ala Val Thr Val Ser Ser 130 135 140

Ala Ser Pro Thr Ser Pro Lys Val Phe Pro Leu Ser Leu Cys Ser Thr 145 150 155 160

Gln Pro Asp Gly Asn Val Val IIe Ala Cys Leu Val Gln Gly Phe Phe
165 170 175

Pro Gln Glu Pro Leu Ser Val Thr Trp Ser Glu Ser Gly Gln Gly Val

			100					105					100		
			180					185					190		
Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly	Asp	Leu	Tyr
		195					200					205			
Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys	Leu	Ala	Gly
	210					215					220				
Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro	Ser	Gln	Asp
225					230					235			•		240
Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro
				245					250					255	
Ser	Thr	Pro	Pro	Thr	Pro	Ser	Pro	Ser	Cys	Cys	His	Pro	Arg	Leu	Ser
			260					265					270		
Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu	Leu	Gly	Ser	Glu	Ala	Asn
		275					280					285			
Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp	Ala	Ser	Gly	Val	Thr	Phe
	290					295					300				
Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala	Val	Gln	Gly	Pro	Pro	Glu
305					310					315					320
Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser	Ser	Val	Leu	Pro	Gly	Cys
				325					330					335	
Ala	Glu	Pro	Trp	Asn	His	Gly	Lys	Thr	Phe	Thr	Cys	Thr	Ala	Ala	Tyr
			340					345					350		
Pro	Glu	Ser	Lys	Thr	Pro	Leu	Thr	Ala	Thr	Leu	Ser	Lys	Ser	Gly	Asn
		355					360					365			
Thr	Phe	Arg	Pro	Glu	Val	His	Leu	Leu	Pro	Pro	Pro	Ser	Glu	Glu	Leu
	370					375					380				
Ala	Leu	Asn	Glu	Leu	Val	Thr	Leu	Thr	Cys	Leu	Ala	Arg	Gly	Phe	Ser
385					390					395					400
Pro	Lys	Asp	Val	Leu	Val	Arg	Trp	Leu	Gln	Gly	Ser	Gln	Glu	Leu	Pro
				405					410					415	

Arg Glu Lys Tyr Leu Thr Trp Ala Ser Trp Gln Glu Pro Ser Gln Gly 420 425 430 Thr Thr Thr Phe Ala Val Thr Ser Ile Leu Arg Val Ala Ala Glu Asp

. 435 440 445

Trp Lys Lys Gly Asp Thr Phe Ser Cys Met Val Gly His Glu Ala Leu
450 455 460

Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp Arg Leu Ala Gly Lys Pro 465 470 475 480

Thr His Val Asn Val Ser Val Val Met Ala Glu Val Asp Gly Thr Cys
485
490
495

Tyr

<210> 3445

<211> 101

<212> PRT

<213> Homo sapiens

<400> 3445

Met Ala Gly Leu Ala Arg Arg Val Val Gly Ala Phe Leu Leu Phe His

1 5 10 15

Phe Lys Gln Lys Ser Gly Ala Glu Thr Gly Glu Ala Ala Leu His Leu
20 25 30

Gly Arg Ser Pro Val Leu Pro Ala Arg Ala Gly Ile Leu Arg Thr Cys 35 40 45

Leu Ser Leu Arg Ala Val Thr Ser Pro Gln Asp Phe Gly Ser Ala Gln 50 55 60

Arg Thr Arg Ser Ala Pro Leu Gly Pro Ile Asn Gln Ala Ser Arg Arg

70 75 80

Val Gln Pro Gly Lys Ala Asn Pro Glu Arg Arg Ala Asn Asp Ser Asp
85 90 95

Ser Gln Gly Lys Ala
100

<210> 3446

<211> 175

<212> PRT

<213> Homo sapiens

<400> 3446

Met His Gly Glu Lys Ser His Gly Arg Gly Gln Ala Gly Arg Gln Val 1 5 10 15

Pro Leu Lys Gln Gln Ser Val Ser Gly Glu Ser Gln Gln Gly Ala Arg
20 25 30

Gln Gly Ala Gly Gln Ser Thr Cys Tyr Leu Ser Ser Ala Phe Leu Cys 35 40 45

Asn Gly Ser Phe Pro Ala Gly Ser Met Ser Leu Trp Asp Pro Gln Pro 50 55 60

Lys Gln Ala Phe Pro Ser Val Leu Trp Cys Ser Trp Ala Gly Val Pro 65 70 75 80

Gly Arg Arg Thr Gly Gln Arg Asp Pro Arg Val Gln Glu Arg Arg Gly
85 90 95

Asp Phe Val Ser Lys Leu Gly Ala Ala Val Gly Gly Glu Pro Leu Ala 100 105 110

Leu Phe Gly Pro His Ser Trp Pro Gly Met Gly His Arg Val Pro Gly
115 120 125

Leu Gly Ala Gly Phe Leu Leu Phe Ala Gly Phe Ala Leu Glu Pro Trp
130

Asp Ser Tyr His Val Val Phe Glu Gly Trp Thr Ile Asp Met Arg Arg
145

150

150

160

Asn Glu Pro Glu Arg Thr Arg Ser Leu Ser Ala Pro Gly Pro Leu
165

170

175

<210> 3447

<211> 487

<212> PRT

<213> Homo sapiens

<400> 3447

Met Glu Leu Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Glu Gly

1 5 10 15

Val His Cys Glu Ala Gln Val Val Glu Ser Gly Gly Gly Leu Val Gln
20 25 30

Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Pro Phe
35 40 45

Ser Ser Phe Trp Met Thr Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 50 55 60

Glu Trp Val Ala Ser Ile Asn Lys Asp Gly Arg Asp Ser Tyr Tyr Val 65 70 75 80

Glu Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Glu Thr
85 90 95

Ser Leu Tyr Leu Gln Met Gly Ser Leu Arg Ala Glu Asp Thr Ala Val 100 105 110

Tyr Tyr Cys Ala Arg Lys Phe Met Phe Asp Ser Trp Ser Ser Tyr Tyr

		115					120					125			
Val	Glu	Gly	His	Tyr	Phe	Asp	Leu	Trp	Gly	Arg	Gly	Thr	Gln	Val	Thr
	130					135					140				
Val	Ser	Ser	Ala	Ser	Pro	Thr	Ser	Pro	Lys	Val	Phe	Pro	Leu	Ser	Leu
145					150					155					160
Asp	Ser	Thr	Pro	Gln	Asp	Gly	Asn	Val	Val	Val	Ala	Cys	Leu	Val	Gln
				165					170					175	
Gly	Phe	Phe	Pro	Gln	Glu	Pro	Leu	Ser	Val	Thr	Trp	Ser	Glu	Ser	Gly
			180					185					190		
Gln	Asn	Val	Thr	Ala	Arg	Asn	Phe	Pro	Pro	Ser	Gln	Asp	Ala	Ser	Gly
		195					200					205			
Asp	Leu	Tyr	Thr	Thr	Ser	Ser	Gln	Leu	Thr	Leu	Pro	Ala	Thr	Gln	Cys
	210					215					220				
Pro	Asp	Gly	Lys	Ser	Val	Thr	Cys	His	Val	Lys	His	Tyr	Thr	Asn	Pro
225					230					235					240
Ser	Gln	Asp	Val	Thr	Val	Pro	Cys	Pro	Val	Pro	Pro	Pro	Pro	Pro	Cys
				245					250					255	
Cys	His	Pro	Arg	Leu	Ser	Leu	His	Arg	Pro	Ala	Leu	Glu	Asp	Leu	Leu
			260					265					270		
Leu	Gly	Ser	Glu	Ala	Asn	Leu	Thr	Cys	Thr	Leu	Thr	Gly	Leu	Arg	Asp
		275					280					285			
Ala	Ser	Gly	Ala	Thr	Phe	Thr	Trp	Thr	Pro	Ser	Ser	Gly	Lys	Ser	Ala
	290					295					300				
Val	Gln	Gly	Pro	Pro	Glu	Arg	Asp	Leu	Cys	Gly	Cys	Tyr	Ser	Val	Ser
305					310					315					320
Şer	Val	Leu	Pro	Gly	Cys	Ala	Gln	Pro	Trp	Asn	His	Gly	Glu	Thr	Phe
				325					330					335	
Thr	Cys	Thr	Ala	Ala	His	Pro	Glu	Leu	Lys	Thr	Pro	Leu	Thr	Ala	Asn
			340					345					350		

Ile Thr Lys Ser Gly Asn Thr Phe Arg Pro Glu Val His Leu Leu Pro 355 360 365 Pro Pro Ser Glu Glu Leu Ala Leu Asn Glu Leu Val Thr Leu Thr Cys 375 380 370 Leu Ala Arg Gly Phe Ser Pro Lys Asp Val Leu Val Arg Trp Leu Gln 390 395 400 385 Gly Ser Gln Glu Leu Pro Arg Glu Lys Tyr Leu Thr Trp Ala Ser Arg 405 410 415 Gln Glu Pro Ser Gln Gly Thr Thr Thr Phe Ala Val Thr Ser Ile Leu 420 425 430 Arg Val Ala Ala Glu Asp Trp Lys Lys Gly Asp Thr Phe Ser Cys Met 435 440 445 Val Gly His Glu Ala Leu Pro Leu Ala Phe Thr Gln Lys Thr Ile Asp 450 455 460 Arg Leu Ala Gly Lys Pro Thr His Val Asn Val Ser Val Val Met Ala 465 470 475 480 Glu Val Asp Gly Thr Cys Tyr 485

<210> 3448

<211> 167

<212> PRT

<213> Homo sapiens

<400> 3448

Met Ala Ser Phe Pro Leu Leu Leu Thr Leu Leu Thr His Cys Ala Gly

1 5 10 15

Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Ala Ser Gly Thr

Pro Gly Gln Thr Val Thr Ile Ser Cys Ser Gly Ala Ser Ser Asn Ile Gly Arg Asn Ser Val Asn Trp Phe Gln Gln Leu Pro Gly Thr Ala Pro Lys Leu Leu Asn His Asn Asn Asn Gln Arg Pro Ala Gly Val Pro Asp Arg Phe Ser Gly Ser Lys Ser Gly Thr Ser Ala Ser Leu Ala Ile Ser Gly Leu His Ser Glu Asp Glu Ala Asp Tyr Tyr Cys Ala Ala Trp Asp Asn Ser Leu Asn Gly Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Glu Ser Leu Leu Pro Ser Pro Ser Pro Leu Leu Gly Gln Phe Leu Leu Phe Leu Phe Val Ser Leu Cys Cys Leu Lys Leu Trp Ser Asp Phe Leu Pro Thr Ser Gln Ala

<210> 3449

<211> 425

<212> PRT

<213> Homo sapiens

<400> 3449

Met Val Pro Glu Gly Leu Cys Ile Ser Val Pro Cys Ser Phe Ser Tyr

1 5 10 . 15

Pro	Arg	Gln	Asp	Trp	Thr	Gly	Ser	Thr	Pro	Ala	Tyr	Gly	Tyr	Trp	Phe
			20					25					30		
Lys	Ala	Val	Thr	Glu	Thr	Thr	Lys	Gly	Ala	Pro	Val	Ala	Thr	Asn	His
		35					40					45			
Gln	Ser	Arg	Glu	Val	Glu	Met	Ser	Thr	Arg	Gly	Arg	Phe	Gln	Leu	Thr
	50					55					60				
Gly	Asp	Pro	Ala	Lys	Gly	Asn	Cys	Ser	Leu	Val	Ile	Arg	Asp	Ala	Gln
65					70					75					80
Met	Gln	Asp	Glu	Ser	Gln	Tyr	Phe	Phe	Arg	Val	Glu	Arg	Gly	Ser	Tyr
				85					90					95	
Val	Arg	Tyr	Asn	Phe	Met	Asn	Asp	Gly	Phe	Phe	Leu	Lys	Val	Thr	Val
			100					105					110		
Leu	Ser	Phe	Thr	Pro	Arg	Pro	Gln	Asp	His	Asn	Thr	Asp	Leu	Thr	Cys
		115					120					125			
His	Val	Asp	Phe	Ser	Arg	Lys	Gly	Val	Ser	Val	Gln	Arg	Thr	Val	Arg
	130					135					140				
Leu	Arg	Val	Ala	Tyr	Ala	Pro	Arg	Asp	Leu	Val	Ile	Ser	Ile	Ser	Arg
145					150					155					160
Asp	Asn	Thr	Pro	Asp	Pro	Pro	Glu	Asn	Leu	Arg	Val	Met	Val	Ser	Gln
				165					170					175	
Ala	Asn	Arg	Thr	Val	Leu	Glu	Asn	Leu	Gly	Asn	Gly	Thr	Ser	Leu	Pro
			180					185					190		
Val	Leu	Glu	Gly	Gln	Ser	Leu	Cys	Leu	Val	Cys	Val	Thr	His	Ser	Ser
		195					200					205			
Pro	Pro	Ala	Arg	Leu	Ser	Trp	Thr	Gln	Arg	Gly	Gln	Val	Leu	Ser	Pro
	210					215					220				
Ser	Gln	Pro	Ser	Asp	Pro	Gly	Val	Leu	Glu	Leu	Pro	Arg	Val	Gln	Val
225					230					235					240
Glu	His	Glu	Gly	Glu	Phe	Thr	Cys	His	Ala	Arg	His	Pro	Leu	Gly	Ser

Gln His Val Ser Leu Ser Leu Ser Val His Tyr Lys Lys Gly Leu Ile Ser Thr Ala Phe Ser Asn Gly Ala Phe Leu Gly Ile Gly Ile Thr Ala Leu Leu Phe Leu Cys Leu Ala Leu Ile Ile Met Lys Ile Leu Pro Lys Arg Arg Thr Gln Thr Glu Thr Pro Arg Pro Arg Phe Ser Arg His Ser Thr Ile Leu Asp Tyr Ile Asn Val Val Pro Thr Ala Gly Pro Leu Val Gln Lys Arg Asn Gln Lys Ala Thr Pro Ser Ser Pro Arg Thr Pro Leu Pro Pro Gly Ala Pro Ser Pro Glu Ser Lys Lys Asn Gln Lys Lys Gln Tyr Gln Leu Pro Ser Phe Pro Glu Pro Lys Ser Ser Thr Gln Ala Pro Glu Ser Gln Glu Ser Gln Glu Glu Leu His Tyr Ala Thr Leu Asn Phe Pro Gly Val Arg Pro Arg Pro Glu Ala Arg Met Pro Lys Gly Thr Gln Ala Asp Tyr Ala Glu Val Lys Phe Gln

<210> 3450

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3450

Met Val Thr Leu Arg Ser Lys Leu Gly Pro Leu Glu Ile Gln Gln Phe

1 5 10 15

Ala Met Leu Leu Arg Glu Tyr Arg Leu Gly Leu Pro Ile Gln Asp Tyr

20 25 30

Cys Thr Gly Leu Leu Lys Leu Tyr Gly Asp Arg Arg Lys Phe Leu Leu

35 40 45

Leu Gly Met Arg Pro Phe Ile Pro Asp Gln Asp Ile Gly Tyr Phe Glu

50 55 60

Gly Phe Leu Glu Gly Val Gly Ile Arg Glu Gly Gly Ile Leu Thr Asp

65 70 75 80

Ser Phe Gly Arg Ile Lys Arg Ser Met Ser Ser Thr Ser Ala Ser Ala

85 90 95

Val Arg Ser Tyr Asp Gly Ala Ala Gln Arg Pro Glu Ala Gln Ala Phe

100 105 110

His Arg Leu Leu Ala Asp Ile Thr His Asp Ile Glu Ala Leu Ala Pro

115 120 125

Asp Asp Asp Asp Asp Glu Asp Glu Pro Arg Gly Ser Arg Gly Gly

130 135 140

Ser Asp Ala Ala Glu Asp Asn Tyr Leu

145 150

<210> 3451

<211> 436

<212> .PRT

<213> Homo sapiens

<40	0>	3451

Met Arg Arg Asp Val Asn Gly Val Thr Lys Ser Arg Phe Glu Met Phe

1 5 10 15

Ser Asn Ser Asp Glu Ala Val IIe Asn Lys Lys Leu Pro Lys Glu Leu 20 25 30

Leu Leu Arg Ile Phe Ser Phe Leu Asp Val Val Thr Leu Cys Arg Cys
35 40 45

Ala Gln Val Ser Arg Ala Trp Asn Val Leu Ala Leu Asp Gly Ser Asn 50 55 60

Trp Gln Arg Ile Asp Leu Phe Asp Phe Gln Arg Asp Ile Glu Gly Arg
65 70 75 80

Val Val Glu Asn Ile Ser Lys Arg Cys Gly Gly Phe Leu Arg Lys Leu 85 90 95

Ser Leu Arg Gly Cys Leu Gly Val Gly Asp Asn Ala Leu Arg Thr Phe
100 105 110

Ala Gln Asn Cys Arg Asn Ile Glu Val Leu Asn Leu Asn Gly Cys Thr
115 120 125

Lys Thr Thr Asp Ala Thr Cys Thr Ser Leu Ser Lys Phe Cys Ser Lys
130 135 140

Leu Arg His Leu Asp Leu Ala Ser Cys Thr Ser Ile Thr Asn Met Ser 145 150 155 160

Leu Lys Ala Leu Ser Glu Gly Cys Pro Leu Leu Glu Gln Leu Asn Ile 165 170 175

Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile Gln Ala Leu Val Arg 180 185 190

Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys Gly Cys Thr Gln Leu 195 200 205

Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His Cys Pro Glu Leu Val 210 215 220

Thr	Leu	Asn	Leu	Gln	Thr	Cys	Leu	Gln	Ile	Thr	Asp	Glu	Gly	Leu	Ile
225					230	-				235	-				240
Thr	Ile	Cys	Arg	Gly	Cys	His	Lys	Leu	Gln	Ser	Leu	Cys	Ala	Ser	Gly
				245					250					255	
Cys	Ser	Asn	Ile	Thr	Asp	Ala	Ile	Leu	Asn	Ala	Leu	Gly	Gln	Asn	Cys
			260					265					270		
Pro	Arg	Leu	Arg	Ile	Leu	Glu	Val	Ala	Arg	Cys	Ser	Gln	Leu	Thr	Asp
		275					280					285			
Val	Gly	Phe	Thr	Thr	Leu	Ala	Arg	Asn	Cys	His	Glu	Leu	Glu	Arg	Met
	290					295					300				
Asp	Leu	Glu	Glu	Cys	Val	Gln	Ile	Thr	Asp	Ser	Thr	Leu	Ile	Gln	Leu
305					310					315					320
Ser	Ile	His	Cys	Pro	Arg	Leu	Gln	Val	Leu	Ser	Leu	Ser	His	Cys	Glu
				325					330					335	
Leu	Ile	Thr	Asp	Asp	Gly	Ile	Arg	His	Leu	Gly	Asn	Gly	Ala	Cys	Ala
			340					345					350		
His	Asp	Gln	Leu	Glu	Val	Ile	Glu	Leu	Asp	Asn	Cys	Pro	Leu	Ile	Thr
		355					360					365			
Asp	Ala	Ser	Leu	Glu	His	Leu	Lys	Ser	Cys	His	Ser	Leu	Glu	Arg	Ile
	370					375					380				
Glu	Leu	Tyr	Asp	Cys	Gln	Gln	Ile	Thr	Arg	Ala	Gly	Ile	Lys	Arg	Leu
385					390					395					400
Arg	Thr	His	Leu	Pro	Asn	Ile	Lys	Val	Tyr	Ala	Tyr	Phe	Ser	Pro	Val
				405					410					415	
Thr	Pro	Pro	Pro	Ser	Val	Gly	Gly	Ser	Arg	Gln	Arg	Phe	Cys	Arg	Cys
			420					425					430		
Cys	Ile	Ile	Leu												
		435													

<210> 3452

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3452

Met Gly Ala Thr Glu Ala Ala Gly Gly Ala Ala Val Ser Arg Ala Arg

1 5 10 15

Asn Gln Thr Trp Thr Ala Leu Gly Pro Gly Cys Arg Asp Gln Val Thr

20 25 30

Arg Ser Pro Glu Gly Cys Trp Pro Arg Ser Gln Asn Pro Gly Ala Ala

35 40 45

Arg Thr Ile Gly Ser Ser Leu Tyr Gly Thr Gly Asp Arg His Pro Ala

50 55 60

Leu Val Pro Cys Ala Val Ala Asp Gly Glu Thr Glu Ala Ser Ser Leu

65 70 75 80

Pro Gly Ile Thr Val Ile Leu Glu Gln Arg Gly Pro Glu Arg Ala Cys

85 90 95

Ser Trp Pro Lys Val Thr Gln

100

<210> 3453

<211> 319

<212> PRT

<213> Homo sapiens

<400> 3453

Met	Ala	Ser	Asp	Asp	Phe	Asp	Ile	Val	Ile	Glu	Ala	Met	Leu	Glu	Ala
1			-	5		-			10					15	
Pro	Tyr	Lys	Lys	Glu	Glu	Asp	Glu	Gln	Gln	Arg	Lys	Glu	Val	Lys	Lys
			20					25					30		
Asp	Tyr	Pro	Ser	Asn	Thr	Thr	Ser	Ser	Thr	Ser	Asn	Ser	Gly	Asn	Glu
		35					40					45			
Thr	Ser	Gly	Ser	Ser	Thr	Ile	Gly	Glu	Thr	Ser	Lys	Lys	Lys	Arg	Ser
	50					55					60				
Arg	Ser	His	Asn	Lys	Ser	Arg	Asp	Arg	Lys	Arg	Ser	Arg	Ser	Arg	Asp
65					70					75					80
Arg	Asp	Arg	Tyr	Arg	Arg	Arg	Asn	Ser	Arg	Ser	Arg	Ser	Pro	Gly	Arg
				85					90					95	
Gln	Cys	Arg	His	Arg	Ser	Arg	Ser	Trp	Asp	Arg	Arg	His	Gly	Ser	Glu
			100					105					110		
Ser	Arg	Ser	Arg	Asp	His	Arg	Arg	Glu	Asp	Arg	Val	His	Tyr	Arg	Ser
		115					120					125			
Pro	Pro	Leu	Ala	Thr	Gly	Tyr	Arg	Tyr	Gly	His	Ser	Lys	Ser	Pro	His
	130					135					140				
Phe	Arg	Glu	Lys	Ser	Pro	Val	Arg	Glu	Pro	Val	Asp	Asn	Leu	Ser	Pro
145					150					155					160
Glü	Glu	Arg	Asp	Ala	Arg	Thr	Val	Phe	Cys	Met	Gln	Leu	Ala	Ala	Arg
				165					170					175	
Ile	Arg	Pro	Arg	Asp	Leu	Glu	Asp	Phe	Phe	Ser	Ala	Val	Gly	Lys	Val
			180			*		185					190		
Arg	Asp	Val	Cys	Ile	Ile	Ser	Asp	Arg	Asn	Ser	Arg	Arg	Ser	Lys	Gly
		195					200					205			
Ile	Ala	Tyr	Val	Glu	Phe	Cys	Glu	Ile	Gln	Ser	Val	Pro	Leu	Ala	Ile
	210					215					220				
Glv	LAII	Thr	Clv	Gln	Ara	Lau	Lau	Glv	Val	Pro	Tla	Tla	Val	Cln	۸1۵

Ser Gln Ala Glu Lys Asn Arg Leu Ala Ala Met Ala Asn Asp Leu Gln Lys Gly Asn Gly Gly Pro Met Arg Leu Tyr Val Gly Ser Leu His Phe Asn Ile Thr Glu Asp Met Leu Arg Gly Ile Phe Glu Pro Phe Gly Lys Ile Asp Asn Ile Val Leu Met Lys Asp Ser Asp Thr Gly Arg Ser Lys Gly Tyr Gly Phe Ile Thr Leu His Pro Pro Pro Leu Gly Thr Val

<210> 3454

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3454

Met Gly Lys Arg Asp Pro Arg Ala Gln Leu Phe Leu Pro Ser Ala Gly Leu Leu Gln Thr Ser Arg Leu His Cys Arg Leu Arg His Phe Leu Ala Glu Pro Pro Ser Phe Leu Leu Ser Phe Gln Leu Leu Leu His Cys Pro Phe Leu Ser Pro Leu Ser Cys Thr Ser Ala Ser Ile Leu Ala Ser Ser Ser Leu Lys Thr Gln Pro Asp Thr Ile Ser Ile Ile Thr Leu Phe

Ile Ser Gln Trp Arg Arg Trp Gly Ser Arg Gln Glu Arg Gln Ser Val
85
90
95
Asn Met Leu Pro Leu Lys Phe Cys Thr Ala Leu Ser Leu Leu Gly Leu
100
105
110

Trp Ala Lys Ile Lys Cys Lys Ser Leu Tyr Tyr Ser 115 120

<210> 3455

<211> 375

<212> PRT

<213> Homo sapiens

<400> 3455

Met Glu Asp Ser Glu Ala Leu Gly Phe Glu His Met Gly Leu Asp Pro

1 5 10 15

Arg Leu Leu Gln Ala Val Thr Asp Leu Gly Trp Ser Arg Pro Thr Leu
20 25 30

Ile Gln Glu Lys Ala Ile Pro Leu Ala Leu Glu Gly Lys Asp Leu Leu
35 40 45

Ala Arg Ala Arg Thr Gly Ser Gly Lys Thr Ala Ala Tyr Ala Ile Pro
50 55 60

Met Leu Gln Leu Leu His Arg Lys Ala Thr Gly Pro Val Val Glu
65 70 75 80

Gln Ala Val Arg Gly Leu Val Leu Val Pro Thr Lys Glu Leu Ala Arg 85 90 95

Gln Ala Gln Ser Met Ile Gln Gln Leu Ala Thr Tyr Cys Ala Arg Asp 100 105 110

Val Arg Val Ala Asn Val Ser Ala Ala Glu Asp Ser Val Ser Gln Arg

		115					120					125			
Ala	Val	Leu	Met	Glu	Lys	Pro	Asp	Val	Val	Val	Gly	Thr	Pro	Ser	Arg
	130					135					140				
Ile	Leu	Ser	His	Leu	Gln	Gln	Asp	Ser	Leu	Lys	Leu	Arg	Asp	Ser	Leu
145					150					155					160
Glu	Leu	Leu	Val	Val	Asp	Glu	Ala	Asp	Leu	Leu	Phe	Ser	Phe	Gly	Phe
				165					170					175	
Glu	Glu	Glu	Leu	Lys	Ser	Leu	Leu	Cys	His	Leu	Pro	Arg	Ile	Tyr	Gln
			180					185					190		
Ala	Phe	Leu	Met	Ser	Ala	Thr	Phe	Asn	Glu	Asp	Val	Gln	Ala	Leu	Lys
		195					200					205			
Glu	Leu	Ile	Leu	His	Asn	Pro	Val	Thr	Leu	Lys	Leu	Gln	Glu	Ser	Gln
	210					215				•	220				
Leu	Pro	Gly	Pro	Asp	Gln	Leu	Gln	Gln	Phe	Gln	Val	Val	Cys	Glu	Thr
225					230					235					240
Glu	Glu	Asp	Lys	Phe	Leu	Leu	Leu	Tyr	Ala	Leu	Leu	Lys	Leu	Ser	Leu
				245					250					255	
Ile	Arg	Gly	Lys	Ser	Leu	Leu	Phe	Val	Asn	Thr	Leu	Glu	Arg	Ser	Tyr
			260					265					270		
Arg	Leu	Arg	Leu	Phe	Leu	Glu	Gln	Phe	Ser	Ile	Pro	Thr	Cys	Val	Leu
		275					280					285			
Asn	Gly	Glu	Leu	Pro	Leu	Arg	Ser	Arg	Cys	His	Ile	Ile	Ser	Gln	Phe
	290					295					300				
Asn	Gln	Gly	Phe	Tyr	Asp	Cys	Val	Ile	Ala	Thr	Asp	Ala	Glu	Val	Leu
305		*			310					315					320
Gly	Ala	Pro	Val	Lys	Gly	Lys	Arg	Arg	Gly	Arg	Gly	Pro	Lys	Gly	Asp
				325					330					335	
Lys	Ala	Ser	Asp	Pro	Glu	Ala	Gly	Val	Ala	Arg	Gly	Ile	Asp	Phe	His
			340					345					350		

His Val Ser Ala Val Leu Asn Phe Asp Leu Pro Pro Thr Pro Glu Ala 355 360 365

Tyr Ile His Arg Ala Gly Arg 370 375

<210> 3456

<211> 309

<212> PRT

<213> Homo sapiens

<400> 3456

Met Leu Pro Glu Asp Ser Gly Gly Ser Pro Asp Ala Ala Ala Ser Asp

1 5 10 15

Lys His Ile Gln Trp Leu Leu Gly Ala Asp Gly Glu Val Trp Val Trp
20 25 30

Ile Met Gly Glu Gly Pro Gly Asp Lys Pro Tyr Glu Glu Ile Ser Glu
35 40 45

Glu Leu Ile Ala Glu Arg Ala Arg Leu Gln Ala Gln Arg Glu Ala Glu
50 55 60

Glu Leu Trp Arg Gln Lys Glu Ala Glu Ile Thr Lys Lys Phe Arg Asp
65 70 75 80

Ala Leu Ala Asn Glu Lys Ala Arg Ile Leu Ala Glu Lys Trp Lys Val
85 90 95

Glu Met Glu Asp Arg Lys Ala Ala Lys Val Leu Glu Glu Arg Ile His
100 105 110

Glu Glu Phe Lys Arg Lys Glu Glu Glu Glu Arg Lys Arg Gly Glu Glu
115 120 125

Gln Ile Arg Leu Gln Glu Gln Arg Ala Lys Glu Leu Tyr Trp Thr

130 135 140

Leu Lys Gln Ala Gln Leu His Cys Gln Ala Ser Glu Lys Glu Glu Arg

145 150 155 160

Glu Trp Glu Glu Gln Leu Arg Arg Ser Lys Ala Ala Asp Glu Glu Arg

165 170 175

Ser Arg Arg Ala Gln Arg Ala Arg Asp Glu Tyr Arg His His Ser Leu

180 185 190

Arg Ala Ile Gln Lys Gly Thr Val Ala Gly Leu Ser Ser Met Phe Arg
195 200 205

Glu Leu Gly Gln Ser His Glu Gln Glu Ala Arg Leu Tyr His His Leu 210 215 220

Pro Asp Pro Gly Leu Pro Gln Pro Leu Ala Leu Pro Val Ser Arg Thr 225 230 235 240

Trp Glu Arg Pro Leu Arg Pro Val Ser Arg Asp Val Ile Val Arg Trp
245 250 255

Phe Lys Glu Glu Gln Leu Pro Arg Arg Ala Gly Phe Glu Arg Asn Thr
260 265 270

Lys Phe Ile Ala Pro Trp Phe His Gly Gly Asn Tyr His Cys Phe Arg 275 280 285

Arg Arg Val Thr Ser Gly Thr Leu Arg Thr Glu Gly Gln Pro Thr Arg 290 295 300

Leu Pro Ser Val Val

305

<210> 3457

<211> 235

<212> PRT

<213> Homo sapiens

<400)> 34	157			-	-									
Met	Gln	Ala	Ser	Leu	Leu	Leu	Ser	Cys	Leu	Pro	Leu	Ser	Ser	Leu	Ser
1				5					10					15	
Thr	Val	Ile	Val	Pro	Pro	Phe	Leu	Gln	Val	Asn	Asp	Leu	Asp	Gly	Tyr
			20					25					30		
Asn	Arg	Thr	Ala	Leu	His	Tyr	Ala	Ala	Glu	Lys	Asp	Glu	Ala	Cys	Val
		35					40					45			
Glu	Val	Leu	Leu	Glu	Tyr	Gly	Ala	Asn	Pro	Asn	Ala	Leu	Asp	Gly	Asn
	50					55					60				
Arg	Asp	Thr	Pro	Leu	His	Trp	Ala	Ala	Phe	Lys	Asn	Asn	Ala	Glu	Cys
65					70					75					80
Val	Arg	Ala	Leu	Leu	Glu	Ser	Gly	Ala	Ser	Val	Asn	Ala	Leu	Asp	Tyr
				85					90					95	
Asn	Asn	Asp	Thr	Pro	Leu	Ser	Trp	Ala	Ala	Met	Lys	Gly	Asn	Leu	Glu
			100					105					110		
Ser	Val	Ser	Ile	Leu	Leu	Asp	Tyr	Gly	Ala	Glu	Val	Arg	Val	Ile	Asn
		115					120					125			
Leu	Ile	Gly	Gln	Thr	Pro	Ile	Ser	Arg	Leu	Val	Ala	Leu	Leu	Val	Arg
	130					135					140				
Gly	Leu	Gly	Thr	Glu	Lys	Glu	Asp	Ser	Cys	Phe	Glu	Leu	Leu	His	Arg
145					150					155					160
Ala	Val	Gly	His	Phe	Glu	Leu	Arg	Lys	Asn	Gly	Thr	Met	Pro	Arg	Glu
				165					170					175	
Val	Ala	Arg	Asp	Pro	Gln	Leu	Cys	Glu	Lys	Leu	Thr	Val	Leu	Cys	Ser
			180					185					190		
Ala	Pro	Gly	Thr	Leu	Lys	Thr	Leu	Ala	Arg	Tyr	Ala	Val	Arg	Arg	Ser
	,	195					200					205			
Leu	Gly	Leu	Gln	Tyr	Leu	Pro	Asp	Ala	Val	Lys	Gly	Leu	Pro	Leu	Pro

235

210 215 220 Ala Ser Leu Lys Glu Tyr Leu Leu Leu Glu

230

<210> 3458

225

<211> 123

<212> PRT

<213> Homo sapiens

<400> 3458

Met Gln Gly Met Gly Leu Gly Leu Ser Ser Val Phe Ala Leu Cys Leu

1 5 10 15

Gly His Thr Ser Ser Phe Cys Glu Ser Val Val Phe Ala Ser Ala Ser
20 25 30

Ile Gly Leu Gln Thr Phe Asn His Ser Gly Ile Ser Val Asn Ile Gln
35 40 45

Asp Leu Ala Pro Ser Cys Ala Gly Phe Leu Phe Gly Val Ala Asn Thr
50 55 60

Ala Gly Ala Leu Ala Gly Val Val Gly Val Cys Leu Gly Gly Tyr Leu 65 70 75 80

Met Glu Thr Thr Gly Ser Trp Thr Cys Leu Phe Asn Leu Val Ala Ile 85 90 95

Ile Ser Asn Leu Gly Leu Cys Thr Phe Leu Val Phe Gly Gln Ala Gln
100 105 110

Arg Val Asp Leu Ser Ser Thr His Glu Asp Leu 115 120 <210> 3459

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3459

Met Lys Val Lys Gln Ala Leu Met Val Thr Leu Thr Gln Gln Asp Arg

1 5 10 15

Tyr Pro Tyr Gln Lys Gly Ile Ser Gly His Arg Asp Arg Arg Ala Arg

20 25 30

Val Glu Thr Pro Glu Asp Glu Asp Gly Ile Tyr Gln Ala Gly Glu Trp

35 40 45

Pro Gln Glu Lys Arg Ala Leu Pro Thr Pro Arg Pro Arg Thr Ser Ser

50 55 60

Leu Gln Ser Arg Val Lys Arg Asn Phe His His Leu Ser Cys Pro Val

65 70 75 80

Cys Gly Thr Leu Pro Arg Gln Pro Glu Gln Thr Val Gln Ala Pro Lys

85 90 95

Thr Leu Ser Ala Cys Val IIe Leu Ala Arg Thr Thr Leu Pro Glu Ala

100 105 110

Thr Ala Met Ser Lys Leu Ile Val Arg Phe Leu Pro Ala Thr Trp Phe

115 120 125

<210> 3460

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3460

Met Leu Arg Leu Arg Lys Gln Gly His Val Arg Arg Gly Lys Ser

1 5 10 15

Ile Gly Glu Asn Lys Asp Thr Gly Gly Asp Ala Thr Trp Arg Ser Pro

20 25 30

Glu Ser Arg Glu Thr Asn Glu Pro Arg Thr Gln Met Ala Lys Lys

35 40 45

Asn Glu Arg Ile Cys Lys Arg Gln His Ser Asn Met Pro Asn Lys Ser

50 55 60

Arg Val Leu Val Phe Lys His Leu Tyr Leu Pro Arg Val Thr Arg Gln

65 70 75 80

Leu Ile Ser Phe His Ile Cys Ser Arg Phe Val Phe Arg Asn Lys Thr

85 90 95

His Val Leu Lys Ser Cys Leu Tyr Val Ala Pro Val Leu Leu Pro Pro

100 105 110

Pro Pro Val Leu Lys Ser Ile Ser Ala Leu Leu Ile Tyr Gly

115 120 125

<210> 3461

<211> 521

<212> PRT

<213> Homo sapiens

<400> 3461

Met Glu Phe Gly Leu Ser Trp Ile Phe Leu Val Val Thr Leu Lys Gly

1 5 10 15

Val His Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Lys

20 25 30

Pro	Gly	Gly	Ser	Leu	Arg	Leu	Ser	Cys	Val	Ala	Ser	Gly	Phe	Thr	Phe
		35					40					45			- *
Ser	Asn	Thr	Trp	Met	Thr	Trp	Val	Arg	Gln	Ala	Pro	Gly	Lys	Gly	Leu
	50					55					60				
Glu	Trp	Val	Gly	Arg	Ile	Ser	Thr	Asp	Ser	Glu	Gly	Ala	Thr	Val	Asp
65					70					75					80
Tyr	Ala	Ala	Pro	Val	Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asp	Ser
				85					90					95	
Lys	Lys	Thr	Leu	Tyr	Leu	Gln	Met	Asn	Ser	Leu	Gln	Val	Glu	Asp	Thr
			100					105					110		
Ala	Val	Tyr	Tyr	Cys	Ser	Thr	Gly	Pro	Ser	Arg	Val	Pro	Gly	Thr	Gln
		115					120					125			
Arg	Tyr	Phe	Asp	Phe	Trp	Gly	Arg	Gly	Thr	Arg	Val	Thr	Val	Ser	Ser
	130					135					140				
Ala	Ser	Thr	Lys	Gly	Pro	Ser	Val	Phe	Pro	Leu	Ala	Pro	Cys	Ser	Arg
145					150					155					160
Ser	Thr	Ser	Gly	Gly	Thr	Ala	Ala	Leu	Gly	Cys	Leu	Val	Lys	Asp	Tyr
				165					170					175	
Phe	Pro	Glu	Pro	Val	Thr	Val	Ser	Trp	Asn	Ser	Gly	Ala	Leu	Thr	Ser
			180					185					190		
Gly	Val	His	Thr	Phe	Pro	Ala	Val	Leu	Gln	Ser	Ser	Gly	Leu	Tyr	Ser
		195					200					205			
Leu	Ser	Ser	Val	Val	Thr	Val	Pro	Ser	Ser	Ser	Leu	Gly	Thr	Gln	Thr
	210					215					220				
Tyr	Thr	Cys	Asn	Val	Asn	His	Lys	Pro	Ser	Asn	Thr	Lys	Val	Asp	Lys
225					230					235					240
Arg	Val	Glu	Leu	Lys	Thr	Pro	Leu	Gly	Asp	Thr	Thr	His	Thr	Cys	Pro
				245	•				250					255	
Arg	Cvs	Pro	Glu	Pro	Lvs	Ser	Cvs	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg

			260					265					270		
Cys	Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys
		275					280					285			
Pro	Glu	Pro	Lys	Ser	Cys	Asp	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Cys	Pro
	290					295					300				
Ala	Pro	Glu	Leu	Leu	Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys
305					310					315					320
Pro	Lys	Asp	Thr	Leu	Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val
				325					330					335	
Val	Val	Asp	Val	Ser	His	Glu	Asp	Pro	Glu	Val	Gln	Phe	Lys	Trp	Tyr
			340					345					350		
Val	Asp	Gly	Val	Glu	Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu
		355					360					365			
Gln	Phe	Asn	Ser	Thr	Phe	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His
	370					375					380				
Gln	Asp	Trp	Leu	Asn	Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys
385					390					395					400
Ala	Leu	Pro	Ala	Pro	Ile	Glu	Lys	Thr	Ile	Ser	Lys	Thr	Lys	Gly	Gln
				405					410					415	
Pro	Arg	Glu	Pro	Gln	Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Glu	Glu	Met
			420					425					430		
Thr	Lys	Asn	Gln	Val	Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro
		435					440					445			
Ser	Asp	Ile	Ala	Val	Glu	Trp	Glu	Ser	Ser	Gly	Gln	Pro	Glu	Asn	Asn
	450					455					460				
Tyr	Asn	Thr	Thr	Pro	Pro	Met	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu
465					470					475					480
Tyr	Ser	Lys	Leu	Thr	Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Ile
				485					490					495	

Phe Ser Cys Ser Val Met His Glu Ala Leu His Asn Arg Phe Thr Gln
500 505 510

Lys Ser Leu Ser Leu Ser Pro Gly Lys
515 520

<210> 3462

<211> 551

<212> PRT

<213> Homo sapiens

<400> 3462

Met Ile Ser Pro Asp Pro Arg Pro Ser Pro Gly Leu Ala Arg Trp Ala
1 5 10 15

Glu Ser Tyr Glu Ala Lys Cys Glu Arg Arg Gln Glu Ile Arg Glu Ser
20 25 30

Arg Arg Cys Arg Pro Asn Val Thr Thr Cys Arg Gln Val Gly Lys Thr
35 40 45

Leu Arg Ile Gln Gln Arg Glu Gln Leu Gln Arg Ala Arg Leu Gln Gln
50 55 60

Phe Phe Arg Arg Asn Leu Glu Leu Glu Glu Lys Gly Lys Ala Gln 65 70 75 80

His Pro Gln Ala Arg Glu Gln Gly Pro Ser Arg Arg Pro Gly Gln Val 85 90 95

Thr Val Leu Lys Glu Pro Leu Ser Cys Ala Arg Arg Ile Ser Ser Pro 100 105 110

Arg Glu Gln Val Thr Gly Thr Ser Ser Glu Val Phe Pro Ala Gln His
115 120 125

Pro Pro Pro Ser Gly Ile Cys Arg Asp Leu Ser Asp His Leu Ser Ser

	130					135					140				
Gln	Ala	Gly	Gly	Leu	Pro	Pro	Gln	Asp	Thr	Pro	Ile	Lys	Lys	Pro	Pro
145					150					155					160
Lys	His	His	Arg	Gly	Thr	Gln	Thr	Lys	Ala	Glu	Gly	Pro	Thr	Ile	Lys
				165					170					175	
Asn	Asp	Ala	Ser	Gln	Gln	Thr	Asn	Tyr	Gly	Val	Ala	Val	Leu	Asp	Lys
			180					185					190		
Glu	Ile	Ile	Gln	Leu	Ser	Asp	Tyr	Leu	Lys	Glu	Ala	Leu	Gln	Arg	Glu
		195					200					205			
Leu	Val	Leu	Lys	Gln	Lys	Met	Val	Ile	Leu	Gln	Asp	Leu	Leu	Ser	Thr
	210					215					220				
Leu	Ile	Gln	Ala	Ser	Asp	Ser	Ser	Trp	Lys	Gly	Gln	Leu	Asn	Glu	Asp
225					230					235					240
Lys	Leu	Lys	Gly	Lys	Leu	Arg	Ser	Leu	Glu	Asn	Gln	Leu	Tyr	Thr	Cys
				245					250					255	
Thr	Gln	Lys	Tyr	Ser	Pro	Trp	Gly	Met	Lys	Lys	Val	Leu	Leu	Glu	Met
			260		•			265					270		
Glu	Asp	Gln	Lys	Asn	Ser	Tyr	Glu	Gln	Lys	Ala	Lys	Glu	Ser	Leu	Gln
		275					280					285			
Lys	Val	Leu	Glu	Glu	Lys	Met	Asn	Ala	Glu	Gln	Gln	Leu	Gln	Ser	Thr
	290					295					300				
Gln	Arg	Ser	Leu	Ala	Leu	Ala	Glu	Gln	Lys	Cys	Glu	Glu	Trp	Arg	Ser
305					310					315					320
Gln	Tyr	Glu	Ala	Leu	Lys	Glu	Asp	Trp	Arg	Thr	Leu	Gly	Thr	Gln	His
				325					330					335	
Arg	Glu	Leu		Ser	Gln	Leu	His		Leu	Gln	Ser	Lys		Gln	Gly
			340					345					350		
Ala	Asp		Arg	Asp	Leu	Gln		Asn	Gln	Ala	Leu		Phe	Leu	Glu
		355					360					365			

Asn Glu His Gln Glu Leu Gln Ala Lys Ile Glu Cys Leu Gln Gly Asp Arg Asp Leu Cys Ser Leu Asp Thr Gln Asp Leu Gln Asp Gln Leu Lys Arg Ser Glu Ala Glu Lys Leu Thr Leu Val Thr Arg Val Gln Gln Leu Gln Gly Leu Leu Gln Asn Gln Ser Leu Gln Leu Gln Glu Gln Glu Lys Leu Leu Thr Lys Lys Asp Gln Ala Leu Pro Val Trp Ser Pro Lys Ser Phe Pro Asn Glu Val Glu Pro Glu Gly Thr Gly Lys Glu Lys Asp Trp Asp Leu Arg Asp Gln Leu Gln Lys Lys Thr Leu Gln Leu Gln Ala Lys Glu Lys Glu Cys Arg Glu Leu His Ser Glu Leu Gly Asn Leu Ser Asp Glu Tyr Leu Ser Cys Leu Arg Lys Leu Gln His Cys Arg Glu Glu Leu Asn Gln Ser Gln Gln Leu Pro Pro Arg Arg Gln Cys Gly Arg Trp Leu Pro Val Leu Met Val Val Ile Ala Ala Ala Leu Ala Val Phe Leu Ala Asn Lys Asp Asn Leu Met Ile

<210> 3463

<211> 1047

<212> PRT

<213> Homo sapiens

<400> 3463 Met Ala Glu Lys Arg Pro Leu Arg Thr Leu Gly Pro Val Met Tyr Gly Lys Leu Pro Arg Leu Glu Thr Asp Ser Gly Leu Glu His Ser Leu Pro His Ser Val Gly Asn Gln Asp Pro Cys Thr Tyr Lys Gly Ser Tyr Phe Ser Cys Pro Met Ala Gly Thr Pro Lys Ala Glu Ser Glu Gln Leu Ala Ser Trp Thr Pro Tyr Pro Pro Leu Tyr Ser Thr Gly Met Ala Gly Pro Pro Leu Gln Ala Asp Asn Leu Leu Thr Asn Cys Leu Phe Tyr Arg Ser Pro Ala Glu Gly Pro Glu Lys Met Gln Asp Ser Ser Pro Val Glu Leu Leu Pro Phe Ser Pro Gln Ala His Ser Tyr Pro Gly Pro Pro Leu Ala Ala Pro Lys Pro Val Tyr Arg Asn Pro Leu Cys Tyr Gly Leu Ser Thr Cys Leu Gly Glu Gly Ala Val Lys Arg Pro Leu Asp Val Asp Trp Thr Leu Ala Thr Gly Pro Leu Leu Pro Ser Ala Asp Pro Pro Cys Ser Leu Ala Pro Ala Pro Ser Lys Gly Gln Thr Leu Asp Gly Thr Phe Leu Arg

Gly Val Pro Ala Glu Gly Ser Ser Lys Asp Ser Ser Gly Ser Phe Ser

Pro	Cys	Gln	Pro	Phe	Leu	Glu	Lys	Tyr	Gln	Thr	Ile	His	Ser	Thr	Gly
	210					215					220				-
Phe	Leu	Ala	Ser	Arg	Tyr	Thr	Gly	Pro	Tyr	Pro	Arg	Asn	Ser	Lys	Gln
225					230					235					240
Ala	Met	Ser	Glu	Gly	Pro	Ser	Ser	Pro	Trp	Thr	Gln	Leu	Ala	Gln	Pro
				245					250					255	
Leu	Gly	Pro	Pro	Cys	Gln	Asp	Thr	Gly	Pro	Thr	His	Tyr	Pro	Pro	Pro
			260					265					270		
His	His	Pro	Pro	Pro	His	Pro	Pro	Gln	Ala	Leu	Pro	Cys	Pro	Pro	Ala
		275					280					285			
Cys	Arg	His	Pro	Glu	Lys	Gln	Gly	Ser	Tyr	Ser	Pro	Ala	Leu	Pro	Leu
	290					295					300				
Gln	Pro	Leu	Gly	Gly	His	Lys	Gly	Thr	Gly	Tyr	Gln	Ala	Gly	Gly	Leu
305					310					315					320
Gly	Ser	Pro	Tyr	Leu	Arg	Gln	Gln	Ala	Ala	Gln	Ala	Pro	Tyr	Ile	Pro
				325					330					335	
Pro	Leu	Gly	Leu	Asp	Ala	Tyr	Pro	Tyr	Pro	Ser	Ala	Pro	Leu	Pro	Ala
			340					345					350		,
Pro	Ser	Pro	Gly	Leu	Lys	Leu	Glu	Pro	Pro	Leu	Thr	Pro	Arg	Cys	Pro
		355					360					365			
Leu	Asp	Phe	Ala	Pro	Gln	Thr	Leu	Ser	Phe	Pro	Tyr	Ala	Arg	Asp	Asp
	370					375					380				
Leu	Ser	Leu	Tyr	Gly	Ala	Ser	Pro	Gly	Leu	Gly	Gly	Thr	Pro	Pro	Ser
385					390					395					400
Gln	Asn	Asn	Val	Arg	Ala	Val	Pro	Gln	Pro	Gly	Ala	Phe	Gln	Arg	Ala
				405					410					415	
Cys	Gln	Pro	Leu	Pro	Ala	Ser	Gln	Pro	Cys	Ser	Glu	Pro	Val	Arg	Pro
			420					425					430		
Ala	Gln	Glu	Ala	Glu	Glu	Lys	Thr	Trp	Leu	Pro	Ser	Cys	Arg	Lys	Glu

		435					440					445			
Lys	Leu	Gln	Pro	Arg	Leu	Ser	Glu	His	Ser	Gly	Pro	Pro	Ile	Val	Ile
	450					455					460				
Arg	Asp	Ser	Pro	Val	Pro	Cys	Thr	Pro	Pro	Ala	Leu	Pro	Pro	Cys	Ala
465					470					475					480
Arg	Glu	Cys	Gln	Ser	Leu	Pro	Gln	Lys	Glu	Asp	Ala	Arg	Pro	Pro	Ser
				485					490					495	
Ser	Pro	Pro	Met	Pro	Val	Ile	Asp	Asn	Val	Phe	Ser	Leu	Ala	Pro	Tyr
			500					505					510		
Arg	Asp	Tyr	Leu	Asp	Val	Pro	Ala	Pro	Glu	Ala	Thr	Thr	Glu	Pro	Asp
		515					520					525			
Ser	Ala	Thr	Ala	Glu	Pro	Asp	Ser	Ala	Pro	Ala	Thr	Ser	Glu	Gly	Gln
	530					535					540				
Asp	Lys	Gly	Cys	Arg	Gly	Thr	Leu	Pro	Aľa	Gln	Glu	Gly	Pro	Ser	Gly
545					550					555					560
Ser	Lys	Pro	Leu	Arg	Gly	Ser	Leu	Lys	Glu	Glu	Val	Ala	Leu	Asp	Leu
				565					570					575	
Ser	Val	Arg	Lys	Pro	Thr	Ala	Glu	Ala	Ser	Pro	Val	Lys	Ala	Ser	Arg
			580					585					590		
Ser	Val	Glu	His	Ala	Lys	Pro	Thr	Ala	Ala	Met	Asp	Val	Pro	Asp	Val
		595					600					605			
Gly	Asn	Met	Val	Ser	Asp	Leu	Pro	Gly	Leu	Lys	Lys	Ile	Asp	Thr	Glu
	610					615					620				
Ala	Pro	Gly	Leu	Pro	Gly	Val	Pro	Val	Thr	Thr	Asp	Ala	Met	Pro	Arg
625					630					635					640
Thr	Asn	Phe	His	Ser	Ser	Val	Ala	Phe	Met	Phe	Arg	Lys	Phe	Lys	Ile
				645					650					655	
Leu	Arg	Pro	Ala	Pro	Leu	Pro	Ala	Ala	Val	Val	Pro	Ser	Thr	Pro	Thr
			660					665					670		

Ser	Ala	Pro	Ala	Pro	Thr	Gln	Pro	Ala	Pro	Thr	Pro	Thr	Ser	Gly	Pro
		675					680					685			
Ile	Gly	Leu	Arg	Ile	Leu	Ala	Gln	Gln	Pro	Leu	Ser	Val	Thr	Cys	Phe
	690					695					700				
Ser	Leu	Ala	Leu	Pro	Ser	Pro	Pro	Ala	Val	Ala	Val	Ala	Ser	Pro	Ala
705					710					715					720
Pro	Ala	Pro	Ala	Pro	Ser	Pro	Ala	Pro	Ala	Arg	Ala	Gln	Ala	Pro	Ala
				725					730					735	
Ser	Ala	Arg	Asp	Pro	Ala	Pro	Ala	Pro	Ala	Pro	Val	Ala	Gly	Pro	Ala
			740					745					750		
Pro	Ala	Ser	Thr	Ser	Ala	Pro	Gly	Asp	Ser	Leu	Glu	Gln	His	Phe	Thr
		755					760					765			
Gly	Leu	His	Ala	Ser	Leu	Cys	Asp	Ala	Ile	Ser	Gly	Ser	Val	Ala	His
	770					775					780				
Ser	Pro	Pro	Glu	Lys	Leu	Arg	Glu	Trp	Leu	Glu	Thr	Ala	Gly	Pro	Trp
785					790					795					800
Gly	Gln	Ala	Ala	Trp	Gln	Asp	Cys	Gln	Gly	Val	Gln	Gly	Leu	Leu	Ala
				805					810					815	
Lys	Leu	Leu	Ser	Gln	Leu	Gln	Arg	Phe	Asp	Arg	Thr	His	Arg	Cys	Pro
			820					825					830		
Phe	Pro	His	Val	Val	Arg	Ala	Gly	Ala	Ile	Phe	Val	Pro	Ile	His	Leu
		835					840					845			
Val	Lys	Glu	Arg	Leu	Phe	Pro	Arg	Leu	Pro	Pro	Ala	Ser	Val	Asp	His
	850					855					860				
Val	Leu	Gln	Glu	His	Arg	Val	Glu	Leu	Arg	Pro	Thr	Thr	Leu	Ser	Glu
865					870					875					880
Glu	Arg	Ala	Leu	Arg	Glu	Leu	Ala	Leu	Pro	Gly	Cys	Thr	Ser	Arg	Met
				885					890					895	
Leu	Lys	Leu	Leu	Ala	Leu	Arg	Gln	Leu	Pro	Asp	Ile	Tyr	Pro	Asp	Leu

Leu Gly Leu Gln Trp Arg Asp Cys Val Arg Arg Gln Leu Gly Asp Phe Asp Thr Glu Ala Gly Ala Val Ser Ser Ser Glu Pro Thr Val Ala Arg Asp Glu Pro Glu Ser Leu Ala Leu Ala Gln Lys Ser Pro Ala Pro Lys Val Arg Lys Pro Gly Arg Lys Pro Pro Thr Pro Gly Pro Glu Lys Ala Glu Ala Ala Gly Glu Glu Ser Cys Gly Ala Ser Pro Thr Pro Ala Thr Ser Ala Ser Pro Pro Gly Pro Thr Leu Lys Ala Arg Phe Arg Ser Leu Leu Glu Thr Ala Trp Leu Asn Gly Leu Ala Leu Pro Thr Trp Gly His Lys Ser Ser Arg Pro Asp Gln Pro Ser Pro Cys Pro Gln Leu Leu Asp Ser Gln Ser His His Leu

<210> 3464

<211> 358

<212> PRT

<213> Homo sapiens

<400> 3464

Met Gln Arg Ser Pro His Ala Ala Glu Thr Gly Val Pro Thr Gly Ser

1 5 10 15

Ala	Lys	Val	Thr	Thr	Thr	Gln	Gln	Arg	Gln	Ala	Ser	Cys	Gly	Gln	Cys
			20	-				25					30		
Arg	Gly	His	His	His	Ala	Ala	Glu	Thr	Gly	Val	Leu	Trp	Ala	Val	Gln
		35					40					45			
Arg	Ser	Pro	Pro	Arg	Ser	Arg	Asp	Arg	Arg	Pro	Val	Gly	Asp	Ala	Glu
	50					55					60				
Val	Thr	Pro	Arg	Ser	Arg	Asp	Arg	Arg	Pro	Val	Gly	Asp	Ala	Glu	Val
65					70					75					80
Thr	Thr	Thr	Gln	Gln	Arg	Arg	Ala	Ser	Pro	Gln	Ala	Val	Gln	Arg	Ser
				85					90					95	
Pro	Pro	Arg	Ser	Arg	Asp	Arg	Arg	Pro	His	Gly	Gln	Cys	Lys	Gly	His
			100					105					110		
His	His	Thr	Ala	Glu	Ile	Gly	Val	Leu	Trp	Ala	Met	Gln	Arg	Ser	Pro
		115					120					125			
Pro	Arg	Ser	Arg	Asp	Arg	Arg	Pro	Val	Gly	Asp	Ala	Glu	Val	Thr	Pro
	130					135					140				
Arg	Ser	Arg	Asp	Arg	Arg	Pro	Val	Gly	Asp	Ala	Glu	Val	Thr	Thr	Thr
145					150					155					160
Gln	Gln	Arg	Arg	Ala	Ser	Pro	Gln	Ala	Val	Gln	Arg	Ser	Pro	Pro	His
				165					170					175	
Ser	Arg	Asp	Arg	Arg	Pro	His	Gly	Gln	Cys	Arg	Gly	His	His	His	Ala
			180					185					190		
Ala	Glu	Thr	Gly	Val	Pro	Thr	Gly	Ser	Ala	Glu	Val	Thr	Thr	Thr	Gln
		195					200					205			
Gln	Arg	Gln	Ala	Ser	Cys	Gly	Gln	Cys	Arg	Gly	His	His	His	Ala	Ala
	210					215					220				
Glu	Thr	Gly	Val	Leu	Trp	Ala	Val	Gln	Arg	Ser	Pro	Pro	Arg	Ser	Arg
225					230					235					240
Asp	Gly	Arg	Pro	His	Arg	Gln	Cys	Arg	Gly	His	His	His	Thr	Ala	Glu

250 255 245 Thr Gly Val Leu Trp Ala Val Gln Arg Ser Pro Pro Arg Ser Arg Asp 265 270 260 Arg Arg Pro Val Gly Ser Ala Glu Val Thr Thr Leu Ser Gln Thr Val 285 275 280 Leu Gly Leu Pro Trp Val Glu His Arg Met Lys Thr Met Cys Phe Glu 300 290 295 Pro Trp Lys Asp Asn Gln Pro Ser Gln Ser Gln Ser Leu Lys Gln Ala 305 310 315 320 Ala Pro Arg Ala Gln Leu Gln Glu Ala Ala Ser Ser Arg Gly Leu Gln 325 330 335 Gln Gly Gly Gly Arg Cys Val Pro Ser Val Ala Ser Trp Cys Pro Leu 340 350 345 Met Ser Arg Ser Val Arg 355

<210> 3465

<211> 336

<212> PRT

<213> Homo sapiens

<400> 3465

Met Ser Arg Ser Val Leu Glu Ala Leu Thr Ser Ser Thr Ala Met Gln

1 5 10 15

Cys Val Pro Ser Asp Gly Cys Ala Met Leu Leu Arg Val Arg Ala Ser
20 25 30

Ile Thr Leu His Glu Arg Leu Arg Gly Leu Glu Ala Cys Ala Met Ser
35 40 45

Leu	Asp	Thr	Gln	Glu	Thr	Gln	Cys	Gln	Ser	Val	Trp	Val	Ala	Arg	Ala
	50					55			-		60	-		-	-
Ser	His	Arg	Gln	Gln	Arg	Gly	Arg	Gln	Leu	Gln	Val	His	Phe	Gly	Cys
65					70					75					80
Phe	Ala	Val	Ser	Val	Ala	Gln	His	Leu	Tyr	Val	Thr	Leu	Arg	Thr	Ile
				85					90					95	
Pro	His	Phe	Cys	Gly	Val	Gln	Leu	Asp	Gln	Arg	His	Leu	Val	Glu	Ala
			100					105					110		
Gly	Lys	Leu	Ser	Tyr	Trp	Val	Asp	Arg	Arg	Arg	Lys	Ala	Ile	Leu	Val
		115					120					125			
Gln	Val	Pro	Arg	Ala	Ser	Gly	Ser	Pro	Asp	Tyr	Tyr	Leu	Arg	Leu	Cys
	130					135					140				
Leu	Lys	Arg	Phe	Thr	Cys	Glu	Asp	Ala	Gly	Ala	Pro	Val	Arg	Val	Thr
145					150					155					160
Ala	Asn	Ser	Val	Pro	Gln	Ala	Val	Phe	Leu	Pro	Tyr	Ser	Gln	Glu	Leu
				165					170					175	
Pro	Cys	Leu	Cys	Leu	Glu	Gly	Trp	Ser	Ala	Thr	Pro	Asp	Ala	Val	Arg
	•		180					185					190		
Ile	Gln	Ile	Cys	Pro	Phe	Glu	Asn	Asp	Thr	Glu	Ala	Leu	Glu	Val	Leu
		195					200					205			
Trp	Asp	Thr	Val	Tyr	Tyr	His	Pro	Glu	Ser	Gln	Thr	Leu	Ser	Trp	Glu
	210					215					220				
Pro	Ala	Cys	Pro	Val	Ser	Gly	His	Val	Ser	Leu	Cys	Trp	Arg	Pro	Gly
225					230					235					240
Pro	Gly	Ala	Gly	Cys	Arg	Lys	Leu	Gln	Gln	Ser	Ser	Gln	Leu	Val	His
				245					250					255	
Arg	Arg	Val	Gln	Tyr	Pro	Leu	Val	Asp	Thr	Gln	Pro	Gln	Leu	Cys	Leu
			260					265				٠	270		
Lvs	Phe	Ser	Thr	Ser	Trp	Glv	Ser	Trp	Val	Arg	Cvs	Pro	Phe	Glu	Gln

275 280 285 Arg Arg Phe Pro Thr Pro Pro Thr Ser Arg Cys Thr Cys Val Thr Gly 295 300 290 Gly Ser His Ser Ser Leu Pro Ala Asn Ala His Ser Arg Pro Ala Arg 310 315 320 305 Ser Leu Gln Pro Gln Val Thr Trp Gln Pro Pro Leu Leu Pro Ser 325 330 335

<210> 3466

<211> 295

<212> PRT

<213> Homo sapiens

<400> 3466

Met Ala Val Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala

1 5 10 15

Leu Ala Leu Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe
20 25 30

Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala 35 40 45

Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala
50 55 60

Ala Ser Gln Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly
65 70 75 80

Pro Glu Tyr Trp Asp Arg Asn Thr Arg Asn Val Lys Ala His Ser Gln
85 90 95

Thr Asp Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr
100 105 110

Asp	Ala	Pro	Lys	Thr	His	Met	Thr	His	His	Ala	Val	Ser	Asp	His	Glu
-		115					120					125			
Ala	Thr	Leu	Arg	Cys	Trp	Ala	Leu	Ser	Phe	Tyr	Pro	Ala	Glu	Ile	Thr
	130					135					140				
Leu	Thr	Trp	Gln	Arg	Asp	Gly	Glu	Asp	Gln	Thr	Gln	Asp	Thr	Glu	Leu
145					150					155					160
Val	Glu	Thr	Arg	Pro	Ala	Gly	Asp	Gly	Thr	Phe	Gln	Lys	Trp	Ala	Ser
				165					170					175	
Val	Val	Val	Pro	Ser	Gly	Gln	Glu	Gln	Arg	Tyr	Thr	Cys	His	Val	Gln
			180					185					190		
His	Glu	Gly	Leu	Pro	Lys	Pro	Leu	Thr	Leu	Arg	Trp	Glu	Pro	Ser	Ser
		195					200					205			
Gln	Pro	Thr	Ile	Pro	Ile	Val	Gly	Ile	Ile	Ala	Gly	Leu	Val	Leu	Phe
	210					215					220				
Gly	Ala	Val	Ile	Ala	Gly	Ala	Val	Val	Ala	Ala	Val	Met	Trp	Arg	Arg
225					230					235					240
Lys	Ser	Ser	Gly	Gly	Glu	Gly	Met	Lys	Gly	Gly	Ser	Glu	Ile	Ser	Cys
				245					250					255	
Leu	Thr	Glu	Gly	Ser	Lys	Thr	Gln	Val	Glu	Val	Cys	Pro	Ala	Ser	Leu
			260					265					270		
Leu	Gly	Ser	Thr	Ile	His	Asn	Tyr	Glu	Pro	Thr	Gln	Pro	Gly	Pro	Cys
		275					280					285			
Val	Pro	Ala	Leu	Thr	Leu	Leu									
	290					295									

<210> 3467

<211> 368

<212> PRT

<213> Homo sapiens

<400> 3467

Met Glu Gly Leu Val Phe Leu Asn Ala Leu Ala Thr Arg Leu Leu Phe

1 5 10 15

Leu Leu His Ser Leu Val Gly Val Trp Arg Val Thr Glu Val Lys Lys

20 25 30

Glu Pro Arg Tyr Trp Leu Leu Ala Leu Leu Asn Leu Leu Leu Phe Leu

35 40 45

Glu Thr Ala Leu Thr Leu Lys Phe Lys Arg Gly Arg Gly Tyr Lys Trp

50 55 60

Phe Ser Pro Ala Ile Phe Leu Tyr Leu Ile Ser Ile Val Pro Ser Leu

65 70 75 80

Trp Leu Leu Glu Leu His His Glu Thr Gln Tyr Cys Ser Ile Gln Ala

85 90 95

Glu Gly Thr Ser Gln Asn Thr Ser Arg Lys Glu Asp Phe Asn Gln Thr

100 105 110

Leu Thr Ser Asn Glu Gln Thr Ser Arg Ala Asp Asp Leu Ile Glu Thr

115 120 125

Ala Lys Val Phe Val Asn Asn Leu Ser Thr Val Cys Glu Lys Val Trp

130 135 140

Thr Leu Gly Leu His Gln Thr Phe Leu Leu Met Leu Ile Ile Gly Arg

145 150 155 160

Trp Leu Leu Pro Ile Gly Gly Gly Ile Thr Arg Asp Gln Leu Ser Gln

165 170 175

Leu Leu Leu Met Phe Val Gly Thr Ala Ala Asp Ile Leu Glu Phe Thr

180 185 190

Ser Glu Thr Leu Glu Glu Gln Asn Val Arg Asn Ser Pro Ala Leu Val

195 200 205

Tyr Ala Ile Leu Val Ile Trp Thr Trp Ser Met Leu Gln Phe Pro Leu Asp Leu Ala Val Gln Asn Val Val Cys Pro Val Ser Val Thr Glu Arg Gly Phe Pro Ser Leu Phe Phe Cys Gln Tyr Ser Ala Asp Leu Trp Asn Ile Gly Ile Ser Val Phe Ile Gln Asp Gly Pro Phe Leu Val Val Arg Leu Ile Leu Met Thr Tyr Phe Lys Val Ile Asn Gln Met Leu Val Phe Phe Ala Ala Lys Asn Phe Leu Val Val Leu Gln Leu Tyr Arg Leu Val Val Leu Ala Leu Ala Val Arg Ala Ser Leu Arg Ser Gln Ser Glu Gly Leu Lys Gly Glu His Gly Cys Arg Ala Gln Thr Ser Glu Ser Gly Pro Ser Gln Arg Asp Trp Gln Asn Glu Ser Lys Glu Gly Leu Ala Ile Pro Leu Arg Gly Ser Pro Val Thr Ser Asp Asp Ser His His Thr Pro

<210> 3468

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3468

Met Gly Val Pro Asn Phe Leu Ser Phe Phe Ser Phe Leu Phe Phe

Phe Lys Ser Leu Arg Gln Gly Leu Ala Gln Leu Pro Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Ser Leu Asn Leu Leu Gly Ser Ser Asp Pro Pro Thr Leu Ala Ser Ser Ile Ser Gly Thr Ala Gly Thr His His His Ala Gln Leu Ile Phe Phe Phe Phe Leu Arg Gln Gly Leu Thr Leu Ser Pro Thr Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Cys Leu Leu Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Gln Val Ala Gly Asn Thr Gly Val His His His Thr Arg Leu Ile Phe Val Phe Leu Leu Glu Thr Arg Phe Cys His Val Gly Gln Thr Gly Leu Lys Leu Leu Ile Ser Gly Asp Gln Pro Thr Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Met Ser Cys Arg Ala Gln Pro Cys Phe Pro Tyr His Leu Ser Arg Ala Pro Cys Val Arg Gly Leu Gly Pro Leu Ser His His Lys Leu Gln Arg Gly Ser Ala Ala Thr

<210> 3469

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3469

Met Ile Gln Leu Pro Pro Thr Arg Ser Leu Ser Gln His Leu Gly Ile

1 5 10 15

Gln Gly Glu Ile Trp Val Gly Thr Gln Pro Asn His Ile Thr Ala Pro

20 25 30

Glu Leu Asn Phe Ser Trp Asn Cys Ser Ser Tyr Glu Gly Glu Phe Ser

35 40 45

Ile Val Pro Thr Ser Gln Leu Ser Ser Gly His Asp Val Ser Asn Trp

50 55 60

His Gly Leu Gly Gln Ala Leu Cys Thr Ser Cys Asn Gly Val Leu Glu

65 70 75 80

Arg Ile His Leu His Phe Gln Leu Leu His Trp Gln Val Gly Val Ser

85 90 95

Pro Asp Ile Arg Lys Gly Leu Asn Ala Gly Gln Ser Lys Lys Asn Asp

100 105 110

Thr Cys Pro Phe Leu Leu Glu His Asp Gly Cys Glu Glu Asp Arg Arg

115 120 125

<210> 3470

<211> 136

<212> PRT

<213> Homo sapiens

<400> 3470

Met Val Glu Leu Thr Val Ala Ala Arg Gln Ala Tyr Lys Thr Met Leu

Glu Asn Val Gln Gln Glu Leu Val Gly Glu Pro Arg Pro Gln Ala Pro Pro Ser Leu Pro Met Gly Val Val Ala Ala Thr Leu Glu Val Val Gly Thr Arg Ala Met Gly Val Ala Gly Ile Met Thr Val Asp Leu Glu Gly Met Asp Met Asp Met Asp Val Pro Glu Thr Ile Met Ala Glu Thr Arg Val Val Met Thr Ala Thr Gln Glu Glu Ile Thr Glu Thr Ile Met Thr Thr Glu Met Arg His Ala His Asn Ile Asp Thr Gln Gly Ile Ile Ser Asp Pro Gly Ser Ser Phe Gln Met Ala Val Phe Ile Lys Val Phe Gly Ala Ala Leu Lys His Leu Ile Leu

<210> 3471

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3471

Met Gly Ile Ser Arg Thr Ala Pro Gln Gly Thr Gly Gly Ile Ile Leu

1 5 10 15

Gln Gly Pro Leu Leu Pro Met Lys Asp Thr Arg Glu Met Leu Leu Arg
20 25 30

Lys Leu Glu Leu Cys Ala Phe Asp His Leu Val Cys Pro Pro Ile Leu 40 45 35 Pro Ser Glu Gly Leu Gly Glu Arg Arg Asn Ala Pro Ser Glu Gly Leu 55 60 50 Gly Glu Arg Arg Asn Ala Arg Gly Arg Cys Ala Leu Gln Arg Leu Tyr 70 75 80 65 Gln His Gln Lys Lys Ala Gly Arg Val Phe Leu Glu Glu Gly Gly Arg 90 95 85 Arg Pro Ala Val Ala Gly Arg Leu Ala Gly Gln Glu Arg Pro Ile Ser 100 105 110 Ala Val Leu Ser Ser Gly Leu Gln His Pro Thr Trp Arg Thr Pro Leu 115 120 125 Pro Leu Ser Ser Thr Val Ala Leu Leu Ser Trp Cys Pro Leu Asn Ala 130 140 135 Tyr Leu Pro Phe Val Pro Pro Asn Leu Ser Arg Pro Pro Gln Val Thr 145 150 155 160 His Phe Leu Ser Cys Ser Glu Leu 165

<210> 3472

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3472

Met Gly Trp Lys Lys Ile Gln Glu Ser Ser Ala Gln Ile Trp Trp Leu

1 5 10 15

Lys Glu Glu Gln Trp Pro Gln Glu Val Val Glu Gln Glu Gly Pro Arg

25 30 20 Ile Glu Pro Arg Arg Thr Met Val Phe Lys Gly Pro Ala Lys Glu Thr 40 45 35 Ser Arg Arg Lys Val Lys Ser Val Val Ser Gln Lys Ser Arg Glu Lys 50 -55 60 Val Ser Arg Asn Ser Gln Gln Cys Glu Ile Leu Leu Cys Lys Ser Ile 70 75 80 65 Met Val Arg Ala Arg Lys Asp Pro Leu Asp Thr Thr Arg Trp Trp Ser 85 90 95 Gly Ile Val Pro Arg Thr Ala Ser Met Val Cys Trp Ser Ser Gln Leu 100 105 11.0 Pro Val Gly Leu Arg Ser Lys Gln Gly Arg Val Gln Arg Gly Arg Leu 115 120 125 Glu Arg Val Ala Ala Gly Gly Gly Cys Cys Phe Leu Gly Ser His Pro 130 135 140 His Ala Pro Thr Gly Cys His Ser Ala Trp Phe Pro Cys Leu Ala Pro 145 150 155 160 Leu Leu Pro Leu Pro Ser Ser Gly Leu Gln Asp Gly Leu Asp Ser Gly

Leu Ser Gly Tyr Ile Asp Leu Asn Lys Ser Pro Lys Phe 180 185

170

165

<210> 3473

<211> 200

<212> PRT

<213> Homo sapiens

<400> 3473

175

Met Pro Arg Gly Leu Ala Asp Lys Gln Gly Pro Glu Glu Cys Asp Ala Val Ala Leu Leu Ser Leu Ile Asn Ser Cys Asp His Phe Val Val Asp Arg Lys Lys Val Thr Glu Val Ile Lys Cys Arg Asn Glu Ile Met His Ser Ser Glu Met Lys Val Ser Ser Thr Trp Leu Arg Asp Phe Gln Met Lys Ile Gln Asn Phe Leu Asn Glu Phe Lys Asn Ile Pro Glu Ile Val Ala Val Tyr Ser Arg Ile Glu Gln Leu Leu Thr Ser Asp Trp Ala Val His Ile Pro Glu Glu Asp Gln Arg Asp Gly Cys Glu Cys Glu Met Gly Thr Tyr Leu Ser Glu Ser Gln Val Asn Glu Ile Glu Met Gln Leu Leu Lys Glu Lys Leu Gln Glu Ile Tyr Leu Gln Ala Glu Glu Gln Glu Val Leu Pro Glu Glu Leu Ser Asn Arg Leu Glu Val Val Lys Glu Phe Leu Arg Asn Asn Glu Asp Leu Arg Asn Gly Leu Thr Glu Asp Met Gln Lys Leu Asp Ser Leu Cys Leu His Gln Lys Leu Asp Ser Gln Glu Pro Gly Arg Gln Thr Pro Asp Arg Lys Ala

<210> 3474

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3474

Met Asp Gly Arg Ala Ala Gly Gly Arg Gly Gly Phe Leu Arg Arg

1 5 10 15

Glu Val Gly Ser Leu Gln Pro Pro Ser His Cys Pro His Pro Thr Val

20 25 30

Trp Leu Leu Pro Gly Leu Ser Phe Pro Ile Cys Glu Thr Gly Glu Met

35 40 45

Gly Ser Leu Ser Gly Pro Arg Ser Ile Leu Met Gly Val Arg Ala Trp

50 55 60

Gln Gly Leu Cys Arg Leu Gly Ser Glu Leu Gly Arg Pro Gly Cys Val

65 70 75 . 80

Ala Thr Gly Val Ser Ala Pro Thr Ser Pro Phe Glu Thr Cys Pro Ala

85 90 95

Phe Leu Phe Ala Ala Ala Thr Ala Val Arg Phe Ala Thr Arg Ser Cys

100 105 110

Gly Cys Pro Pro Arg Gln Gly Asp

115 120

<210> 3475

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3475

Met Glu Pro Leu Asn Ser Ala Val Phe Asn Leu Arg Glu Asp Arg Val $\bar{1}$ 10 15 Gly Gln Phe Ser Trp Gln Gln Leu Arg Glu Gly Glu Ser Arg Glu Gln 20 25 30 Gly Ser Asp Lys Val Cys Leu Ala Gly Ser Lys His Phe Met Glu Trp 35 40 45 Arg Pro Leu Ala Val Arg Asp Leu Arg Lys Ile Cys Gln Gly Leu Leu 50 55 60 His Ser Glu Gly Leu Gln Phe Gly Trp Leu Gly Thr Leu Leu Pro Cys 65 70 75 80 Thr Asp Gly Ala Pro Ile Ser Met Thr Arg Val Leu Val Gln Thr Gln 85 90 95 Phe Ile Val Phe Thr Asn Ser Met His Ser Asn Gln Thr Glu Ile Glu 100 105 110 Ile Gln Tyr Asn Ile Lys Gly Asp Leu Gly Gln Ala Gln Trp Leu Ile 115 120 125 Leu Val Ile Pro Ala Leu Trp Asp Ala Glu Leu Gly Gly Ser Leu Glu 130 135 140 Ala Arg Ser Leu Gly Pro Ala Trp Ala Arg Lys 145 150 155

<210> 3476

<211> 113

<212> PRT

<213> Homo sapiens

<400> 3476

Met Ile Ser Val His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asp Ser

Pro Ala Leu Ala Ser Gln Ile Ala Gly Ile Thr Gly Met His His His Ala Arg Gln Ile Phe Ile Phe Leu Ile Glu Thr Gly Phe His His Val Asp Gln Ala Gly Leu Lys Leu Leu Ala Ser Ser Tyr Leu Pro Ala Leu Ala Ser Gln Ser Phe Gly Ile Thr Gly Val Ser His Arg Ala Trp Pro Pro Leu Asn Thr Leu Lys Met Ser Gln Cys Ile Leu Val Ser Ile Phe Tyr Ile Gly Lys Phe Val Val Asn Leu Ile Leu Ile Pro Val His Leu Val <210> 3477 <211> 124 <212> PRT <213> Homo sapiens <400> 3477 Met Leu Met Val Leu Phe Lys Tyr Trp Phe Val Ser Phe Gly Asp Val

Leu Val Phe Gln Gly Tyr Asp Cys Pro Asp Asn Gly Ser Ser Met Glu

Phe Leu Leu Ile Gly Ser Leu Pro Ser Thr Leu Ile Lys Ser Ile Phe

出証特2004-3059660

Cys Leu Phe Val Leu Arg Gln Ser Phe Ala Leu Val Ala Gln Ala Gly 60 50 55 Val Arg Trp Cys Asp Leu Gly Ser Ala Gln Pro Leu Pro Pro Gly Phe 70 75 80 65 Lys Leu Val Ser Cys Leu Gly Leu Pro Ser Ser Trp Asp Tyr Arg His 85 90 95 Ala Pro Pro Arg Leu Ala Asn Phe Val Phe Leu Val Glu Thr Gly Phe 100 105 110 Leu His Val Gly Gln Ala Gly Leu Glu Leu Pro Thr 115 120

<210> 3478

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3478

Met Trp Trp Pro Leu Ala Gly Met Thr Asp Ser Glu Val Ile Thr His

1 5 10 15

Ser His Cys Asn Cys His Ser Val Ala Ser Phe Ser Gln Gly Gln Gly
20 25 30

Pro Gly Glu Arg Thr Gly Trp Gln Pro Ala Ala Gln Leu Glu Met Arg
35 40 45

Ser Leu Ser Phe Ser Ser Tyr Leu Met Glu Ala Ser Gln Met Gln Asp
50 55 60

Gly Ser Ser Arg Pro Ser Ile Thr Ser Ser Gln Cys Pro Lys Ala Arg
65 70 75 80

Arg Glu Ala Val Val Phe Lys Ser Arg Lys Thr Phe Leu Asn Leu Ala

85 90 95

Arg Ile Ala Ser Gln Thr Leu Ser 100

<210> 3479

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3479

Met Glu Ala Gln Ser Cys Glu Gln Glu Thr Thr Ala Arg Arg Asn Gly

1 5 10 15

Gly Ala Arg Ser Leu Lys Gly Asn Ala Ala Gly Gly Val Val Lys Asp
20 25 30

Asn Ile Cys Phe Gly Ala Thr Ser Gly Ala Val Thr Lys Lys Pro Ser

40
45

Thr Leu Arg Lys Lys Glu Lys Phe Gly Tyr Arg Glu Thr Pro Cys Ser
50 55 60

Lys Cys Cys Asp Ser Lys Thr Ala Gly Phe Ala Pro Leu Ala Lys Glu
65 70 75 80

Pro Thr Glu Thr Pro Gly Ala Ala Thr Ala Lys Pro Ala Leu Glu Gly
85 90 95

Leu Gly Trp Arg Lys Pro Arg Thr Glu Thr Arg Lys Leu Cys Thr Ala
100 105 110

Arg Leu Ala Val Asp Thr Asn Arg Lys Val Ser Arg Leu Leu Ser Gly
115 120 125

Arg Lys Arg Gly Ser Lys Pro Ala Thr Gln Trp Arg Glu Pro Arg Ser 130 135 140 His

145

<210> 3480

<211> 240

<212> PRT

<213> Homo sapiens

<400> 3480

Met Gly Leu His Leu Trp Ala Ala Gly Pro Gly Thr His Pro Ala Gly

1 5 10 15

Ile Ser Asp Leu Leu Ala Glu Val Ser Ala Glu Val Asp Gly Pro Val

20 25 30

Pro Gly Tyr Leu Ser Ser Pro Gln Ser Ile Thr Asp Thr Cys Leu Tyr

35 40 45

Ile Phe Thr Ser Gly Thr Thr Gly Leu Pro Lys Ala Ala Arg Ile Ser

50 55 60

His Leu Lys Ile Leu Gln Cys Gln Gly Phe Tyr Gln Leu Cys Gly Val

65 70 75 80

His Gln Glu Asp Val Ile Tyr Leu Ala Leu Pro Leu Tyr His Met Ser

85 90 95

Gly Ser Leu Leu Gly Ile Val Gly Cys Met Gly Ile Gly Ala Thr Val

100 105 110

Val Leu Lys Ser Lys Phe Ser Ala Gly Gln Phe Trp Glu Asp Cys Gln

115 120 125

Gln His Arg Val Thr Val Phe Gln Tyr Ile Gly Glu Leu Cys Arg Tyr

130 135 140

Leu Val Asn Gln Pro Pro Ser Lys Ala Glu Arg Gly His Lys Val Arg

Leu Ala Val Gly Ser Gly Leu Arg Pro Asp Thr Trp Glu Arg Phe Val Arg Arg Phe Gly Pro Leu Gln Val Leu Glu Thr Tyr Gly Leu Thr Glu Gly Asn Val Ala Thr Ile Asn Tyr Thr Gly Gln Arg Gly Ala Val Gly Arg Ala Ser Trp Leu Tyr Lys Glu Ser Gln Phe Gly Thr Pro Arg Gly Thr Val Trp Pro His Leu Gln Val Ser Gln Gly Cys Trp Trp Pro Arg

<210> 3481

<211> 164

<212> PRT

<213> Homo sapiens

<400> 3481

Met Leu Leu Thr Thr Leu Thr His Phe Phe Phe Phe Phe Phe Leu Arg Gln Ser Leu Thr Leu Ser Ala Trp Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Arg Leu Pro Gly Ser Ser Asn Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys His His Ala Arg Leu Ile Phe Val Phe Leu Val Glu Met Gly Phe His His Val Gly Glu Ala Gly Leu Glu Leu Leu Thr Ser Gly Asn Pro Pro Ala Ser Ala Ser Gln Ser Ala Gly Ile Thr Ser Val Ser His Arg Ala Arg Pro Thr Val Phe Lys Ser Val Glu Thr Ser Phe Pro Leu Met Pro Cys Ser Arg Ala Asp Tyr Asn Ser His His Ala Trp Gln Pro Leu Gly Pro Arg Phe Arg Thr Ser Leu Thr Arg Phe Thr Ser Pro Gly Ile Leu Arg Cys Phe Pro Asn Ser Pro Ala

<210> 3482

<211> 127

<212> PRT

<213> Homo sapiens

<400> 3482

Met Pro Val Cys Pro Cys Leu His Leu Phe Phe Ser Phe Phe Phe Phe Cys Phe Leu Arg Trp Ser Phe Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Ala Ile Leu Ala Arg Cys Ser Leu His Leu Pro Gly Ser Ser Asp Ser Pro Ala Ser Ala Ser Arg Val Ala Gly Ile Thr Gly Met Cys Tyr His Thr Trp Leu Ile Leu Val Phe Leu Ile Glu Thr Gly Phe His His

65 70 75 80 Val Gly Gln Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Leu Pro Ala 90 95 85 Leu Ala Ser Gln Ser Val Gly Ile Thr Gly Leu Ser His Pro Ala Arg 100 105 110 Pro Asn Ala Ser Ile Leu Phe Leu Asp Ala Phe His Ser Lys Trp 115 120 125

<210> 3483

<211> 165

<212> PRT

<213> Homo sapiens

<400> 3483

Met Ser His Val Ile Trp Thr Leu Lys Met Glu Cys Ser Glu Thr His

1 5 10 15

Val Gln Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met
20 25 30

Lys Leu Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp

35 40 45

Asp Thr Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln
50 55 60

Asn Glu Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro
65 70 75 80

Gly Tyr Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val 85 90 95

Ile Leu Ile Ile Leu Ile Ile Ile Phe Cys Phe Ile Glu Val Lys Thr
100 105 110

Ile Ile Asn Ser Gly Phe Gln Asn Thr Ile Leu Cys Leu Cys Gly Phe
115
120
125

Arg Ile His Lys Leu Lys Thr Asn Val Thr Phe Pro Leu Asp Ile Leu
130
135
140

Leu Leu Ser Phe Lys Ala Glu Val Cys Phe Val Leu Leu Gln Cys
145
150
155
160

Ile Phe Gln Asp Cys
165

<210> 3484

<211> 405

<212> PRT

<213> Homo sapiens

<400> 3484

Met Ser Ser Ser Val Lys Thr Pro Ala Leu Glu Glu Leu Val Pro Gly

1 5 10 15

Ser Glu Glu Lys Pro Lys Gly Arg Ser Pro Leu Ser Trp Gly Ser Leu

20 25 30

Phe Gly His Arg Ser Glu Lys Ile Val Phe Ala Lys Ser Asp Gly Gly
35 40 45

Thr Asp Glu Asn Val Leu Thr Val Thr Ile Thr Glu Thr Thr Val Ile
50 55 60

Glu Ser Asp Leu Gly Val Trp Ser Ser Arg Ala Leu Leu Tyr Leu Thr
65 70 75 80

Leu Trp Phe Phe Phe Ser Phe Cys Thr Leu Phe Leu Asn Lys Tyr Ile

85 90 95

Leu Ser Leu Leu Gly Gly Glu Pro Ser Met Leu Gly Ala Val Gln Met

			100					105					110		
Leu	Ser	Thr	Thr	Val	Ile	Gly	Cys	Val	Lys	Thr	Leu	Val	Pro	Cys	Cys
		115					120					125			
Leu	Tyr	Gln	His	Lys	Ala	Arg	Leu	Ser	Tyr	Pro	Pro	Asn	Phe	Leu	Met
	130					135					140				
Thr	Met	Leu	Phe	Val	Gly	Leu	Met	Arg	Phe	Ala	Thr	Val	Val	Leu	Gly
145					150					155					160
Leu	Val	Ser	Leu	Lys	Asn	Val	Ala	Val	Ser	Phe	Ala	Glu	Thr	Val	Lys
				165					170					175	
Ser	Ser	Ala	Pro	Ile	Phe	Thr	Val	Ile	Met	Ser	Arg	Met	Ile	Leu	Gly
			180					185					190		
Glu	Tyr	Thr	Gly	Leu	Leu	Val	Asn	Leu	Ser	Leu	Ile	Pro	Val	Met	Gly
		195					200					205			
Gly	Leu	Ala	Leu	Cys	Thr	Ala	Thr	Glu	Ile	Ser	Phe	Asn	Val	Leu	Gly
	210					215					220				
Phe	Ser	Ala	Ala	Leu	Ser	Thr	Asn	Ile	Met	Asp	Cys	Leu	Gln	Asn	Val
225					230					235					240
Phe	Ser	Lys	Lys	Leu	Leu	Ser	Gly	Asp	Lys	Tyr	Arg	Phe	Ser	Ala	Pro
				245					250					255	
Glu	Leu	Gln	Phe	Tyr	Thr	Ser	Ala	Ala	Ala	Val	Ala	Met	Leu	Val	Pro
			260					265					270		
Ala	Arg	Val	Phe	Phe	Thr	Asp	Val	Pro	Val	Ile	Gly	Arg	Ser	Gly	Lys
		275					280					285			
Ser	Phe	Ser	Tyr	Asn	Gln	Asp	Val	Val	Leu	Leu	Leu	Leu	Thr	Asp	Gly
	290				٠	295					300				
Val	Leu	Phe	His	Leu	Gln	Ser	Ile	Thr	Ala	Tyr	Ala	Leu	Met	Gly	Lys
305					310					315					320
Ile	Ser	Pro	Val	Thr	Phe	Ser	Val	Ala	Ser	Thr	Val	Lys	His	Ala	Leu
				325					330					335	

Ser Ile Trp Leu Ser Val Ile Val Phe Gly Asn Lys Ile Thr Ser Leu 340 345 350 Ser Ala Val Gly Thr Ala Leu Val Thr Val Gly Val Leu Leu Tyr Asn 360 355 365 Lys Ala Arg Gln His Gln Gln Glu Ala Leu Gln Ser Leu Ala Ala Ala 375 380 370 Thr Gly Arg Ala Pro Asp Asp Thr Val Glu Pro Leu Leu Pro Arg Asp 390 395 400 385 Pro Arg Gln His Pro 405

<210> 3485

<211> 126

<212> PRT

<213> Homo sapiens

<400> 3485

Met Lys Ser Val Ala Gln Leu Val Tyr Phe Phe Gly Leu Leu Leu 1 5 10 15

Asn Phe Val Ser Pro Lys Ser Glu Tyr Glu Ser Phe Cys Val Leu Ser 20 25 30

Leu Leu Phe Phe Arg Glu Val Lys Val Val Gly Val Gln Pro Ile
35 40 45

Phe Val Tyr Phe Phe Cys Ser Ser Tyr Ile Tyr Tyr Tyr Trp Phe
50 55 60

Leu Ser Gly Asn Phe Ser Phe Thr Leu Thr Leu Ala Leu Pro Pro Ser 65 70 75 80

Ala Phe Phe Ser Trp Leu Gln Leu Ser Thr Ile Ile Cys Gly Phe Pro

85 90 95

Glu Gly Glu Pro Trp Trp Ser Gly Gly Gly Gly Arg Pro His Ser Lys

100 105 110

Ser Gly Val Val Gly Val Pro Asp Arg Val Leu Ile Gln Glu

115 120 125

<210> 3486

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3486

Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser

1 5 10 15

Val Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Glu Leu Phe Pro

20 25 30

Val Leu Phe Pro Met Leu Phe Pro Ala Leu Leu Pro Ala Leu Phe His

35 40 45

Met Leu Phe Pro Ala Leu Phe Pro Met Leu Phe Pro Ala Leu Phe Ser

50 55 60

Ala Pro Phe Pro Met Arg Ser Leu His Cys Ser Pro Arg Cys Ser Pro

65 70 75 80

Cys Cys Ser Pro Arg Cys Ser Pro Cys Cys Ser Leu His Cys Ser Pro

85 90 95

Cys Cys Ser Leu Gln Cys Ser Leu His Cys Ser Pro His Cys Ser Leu

100 105 110

His Cys Ser Pro Cys Cys Phe Leu His Tyr Ser Pro Cys Cys Ser Leu

115 120 125

His	Phe	Ser	Leu	Cys	Arg	Ser	Pro	Cys	Ile	Pro	Cys	Thr	Val	Pro	Cys
	130					135					140			· -	
Thr	Val	Pro	His	Ala	Val	Pro	Cys	Asn	Ala	Pro	Cys	Thr	Val	Pro	Arg
145					150					155					160
Thr	Ala	Pro	Cys	Thr	Ile	Pro	His	Ala	Val	Pro	Cys	Thr	Phe	Leu	Cys
				165					170					175	
Ala	Val	Pro	His	Ala	Phe	Pro	Ala	Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met
			180					185					190		
Leu	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala	Pro	Phe	Pro	Met
		195					200					205			
Leu	Phe	Pro	Ala	Gly	Phe	Pro	Ala	Leu	Phe	Pro	Met	Leu	Phe	Pro	Ala
	210					215					220				
Pro	Phe	Pro	Met	Leu	Phe	Pro	Ala	Gly	Phe	Pro	Ala	Leu	Phe	Pro	Met
225					230					235					240
Leu	Phe	Pro	Ala	His	Phe	Met	Pro	Gln	Thr	Phe	Pro	Phe	Ser	His	Gln
				245					250					255	
His	Thr	Gly	Ser	Ser	Phe	Lys	Ser	Phe	Cys	Ser	Val	Ser	Asn	His	Ser
			260					265					270		
Ser	Ala	Gly	Thr	Gly	Trp	Gly	Gln	Asp	Gly	Val	Arg	Pro	Cys	Arg	Pro
		275					280					285			
Trp	Pro	Ser	Arg	Ser	Val		Leu	Arg	Arg	Leu		Gln	Arg	His	Gly
	290			•		295					300				
Arg	Leu	Leu	Lys	Ala		Glu	Arg	Ser	Thr		Trp	Thr	Pro	Thr	Thr
305					310					315					320
	A 1 -	Thr	Dra	C ~ ~	Crro	C1m	Cvc	Pro							
Arg	на	1111	110	325	Cys	Gry	Cys	110							

<210> 3487

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3487

Met Ile Glu Ile Leu Asn Lys Ser Lys Asn Cys Glu Gly Phe Ser Glu

1 5 10 15

Arg Arg Thr Gly Arg Gly Ile Trp Thr Trp Val Cys Met His Arg Pro
20 25 30

Gly Cys Ser Arg Val Ala Asp Gln Gln His Leu Glu Asp Phe Thr Glu
35 40 45

Cys Phe Cys His Leu His Pro Ser Trp Pro Arg Pro Ala Leu Phe Pro 50 55 60

Leu Leu Cln Leu Ile Phe Pro Asp Leu Val Glu Gly Leu Val Leu 65 70 75 80

Val Asn Ile Asp Pro Asn Gly Lys Gly Trp Ile Asp Trp Ala Ala Thr

85 90 95

Lys Leu Ser Gly Leu Thr Ser Thr Leu Pro Asp Thr Val Leu Ser His

100 105 110

Leu Phe Ser Gln Glu Glu Leu Val Asn Asn Thr Glu Leu Val Gln Ser 115 120 125

Tyr Arg Gln Gln Ile Gly Asn Val Val Asn Gln Ala Asn Leu Gln Leu 130 135 140

Phe Trp Asn Met Tyr Asn Ser His Phe Pro Gly Ala Leu Trp Ala Gln 145 150 155 160

Leu Val Leu

<210> 3488

<211> 109

<212> PRT

<213> Homo sapiens

<400> 3488

Met Asn Gly Arg Leu Ser Lys Glu Asp Val Tyr Ala Ala Ser Lys His

1 5 10 15

Glu Lys Ser Ser Ser Ser Leu Phe Ile Arg Glu Met Gln Ile Lys Thr

20 25 30

Ala Met Arg Tyr His Leu Met Pro Val Arg Met Val Val Ile Lys Lys

35 40 45

Ser Gly Asn Asn Arg Cys Trp Arg Gly Cys Gly Glu Ile Gly Thr Leu

50 55 60

Leu His Cys Trp Trp Glu Gly Lys Leu Val Gln Pro Leu Trp Lys Thr

65 70 75 80

Val Trp Gln Phe Thr Lys Asp Leu Val Leu Glu Ile Pro Phe Asp Pro

85 90 95

Ala Ile Pro Leu Leu Gly Ile Tyr Pro Lys Asp Tyr Lys

100 105

<210> 3489

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3489

Met Glu Lys Asn Ile Ser Leu Tyr Glu Tyr Thr Thr Phe Cys Leu Ser

Ile Tyr Pro Leu Ile Gly Cys Phe Tyr Phe Phe Leu Ala Ile Met Asn Asn Ile Ala Val Asn Ile Cys Val Gln Gly Phe Ser Gly His Lys Phe Leu Phe Phe Leu Gly Ile Tyr Leu Gly Val Glu Leu Leu Gly His Ile Val Ile Leu Phe Asn Phe Leu Lys Asn Phe Pro Thr Val Leu His Gly Gly Cys Ala Ile Val Tyr Ser Tyr Gln Gln Cys Met Lys Leu Gln Ile Ser Pro His Pro Glu Asn Pro Phe Ile Ile Phe Cys Phe Ser Phe

<210> 3490

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3490

Met Val Ser Arg Pro Pro Arg Thr Pro Leu Ser Pro Ser Ser Trp Thr

Pro Ala Met Gly Leu Arg Ala Ser Arg Asn Cys Ser Arg Thr Glu Asn

Ala Val Cys Gly Cys Ser Pro Gly His Phe Cys Ile Val Gln Asp Gly

Asp His Cys Ala Ala Cys Arg Ala Tyr Ala Thr Ser Ser Pro Gly Gln

Arg Val Gln Lys Gly Gly Thr Glu Ser Gln Asp Thr Leu Cys Gln Asn 65 70 75 80 Cys Pro Pro Gly Thr Phe Ser Pro Asn Gly Thr Leu Glu Glu Cys Gln 90 85 95 His Gln Thr Lys Cys Ser Trp Leu Val Thr Lys Ala Gly Ala Gly Thr 100 .105110 Ser Ser Ser His Trp Val Trp Trp Phe Leu Ser Gly Ser Leu Val Ile 115 120 125 Val Ile Val Cys Ser Thr Val Gly Leu Ile Ile Cys Val Lys Arg Arg 130 135 140 Lys Pro Arg Gly Asp Val Val Lys Val Ile Val Ser Val Gln Arg Lys 145 150 155 160 Arg Gln Glu Ala Glu Gly Glu Ala Thr Val Ile Glu Ala Leu Gln Ala 165 170 175 Pro Pro Asp Val Thr Thr Val Ala Val Glu Glu Thr Ile Pro Ser Phe 180 185 190 Thr Gly Arg Ser Pro Asn His 195 <210> 3491

<211> 120

<212> PRT

<213> Homo sapiens

<400> 3491

Met Arg Lys Glu Lys Gln Ser Lys Ser Leu Leu Tyr Leu Leu Lys IIe

1 5 10 15

Ser Ser Leu Phe Ser Ser Thr Leu Phe His Gln His Leu Pro Ala Gln

20 25 30 Asn Phe His Asn Asp Pro Ile Leu Lys Pro Asn Ser Val Ser Arg Leu 35 40 45 Leu Thr Ser Thr Ile Ala Arg Thr His Glu Asn Leu Leu Ile Gln Ala 50 55 60 His Ala Met Ala Gln Ala His Ala Glu Gln Ala Pro Leu Thr Pro Leu 70 75 80 65 Leu Leu Pro Ser Ala Ser Thr Ala Leu Leu Asn Arg His Val Asn Thr 85 90 95 Gly Pro Phe Met His Arg Ser Lys Gly Ser Leu Arg Pro Lys Ala Leu 100 105 110 Cys Thr Thr Leu Cys Asp Ser Leu 115 120 <210> 3492

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3492

Met Val Ser Ala Ala Leu Ile Ser Gln Ser Leu Pro Arg Ser Pro His

1 5 10 15

Ser Arg Ser Pro Pro Leu Ala Arg Ser Arg Arg Leu Pro Thr Pro Arg
20 25 30

Ser Arg Pro Leu Arg Pro Ser Phe Leu Pro His Pro Ser Pro Arg Pro 35 40 45

Arg Asn Trp Pro Gly Pro Ser Lys Cys Arg Pro Arg Ser Arg Leu Gln
50 55 60

Asn Phe Leu Lys Leu Ser Asn Ser Lys His Pro Trp Pro Ala Ser Ser 65 70 75 80

Lys Leu Pro Leu Leu Pro Ser Arg Leu Leu His Arg Leu Trp Arg Ser 85 90 95

Arg Arg Arg Arg Arg Pro Gly Ser Arg Cys Arg 100 105

<210> 3493

<211> 117

<212> PRT

<213> Homo sapiens

<400> 3493

Met His Leu Leu Leu Ser Ser Ser Tyr Leu Asn Leu Leu Gln Arg

1 5 10 15

Met Leu Trp Arg Leu Pro Trp Leu Ser His Val IIe His Lys Glu His
20 25 30

Ala Thr Thr Ile Gln Phe Leu Gln Pro Arg Gly Arg Glu Gln Gln Tyr
35 40 45

Leu Cys Arg Arg His Ser Glu Leu Pro Ser Ala Ser Arg Asn Gln
50 55 60

Ile Ser Glu Arg Arg Leu Ser Ala Tyr Leu Arg Thr Ile Ser Gly Val
65 70 75 80

Thr Val Cys Ser Asp Gly Leu Ser Thr Ser Val Trp Ser Cys Leu Leu 85 90 95

Phe Arg Arg Asp Leu Asp Pro Ala Trp Met Met Glu Gly Lys Gly Leu
100 105 110

Ala Gln Gly Glu Gly

115

<210> 3494

<211> 111

<212> PRT

<213> Homo sapiens

<400> 3494

Met Cys Val Cys Cys Phe Ile Phe Leu Met Leu Cys Leu Gly Arg Glu

1 5 10 15

Cys Ser Tyr Ile Tyr Val Tyr Ile Leu Tyr Ser Pro Ile Trp Glu Ser

20 25 30

Arg Ser Glu Val Ile Ala Ser Ser Asp Cys Phe Ser Ser Glu Val Gly

35 40 45

Tyr His Trp Phe Thr Cys Leu Tyr Leu Asn Val Leu Pro Ser Val Glu

50 55 60

Ser Pro Ala Cys Gly Glu Glu Ser Leu Leu Val Met Phe Leu Phe Ser

65 70 75 80

Val Phe Met Gly Glu Phe Ile Gln Met Phe Tyr Leu Phe Gln Ser Thr

85 90 95

Leu Asp Cys Ala Glu Met Ser Ser Ser Val Ala Gln Glu Lys Ala

100 105 110

<210> 3495

<211> 168

<212> PRT

<213> Homo sapiens

<400> 3495

Met Arg Leu Pro Ala Arg Leu Pro Ser Thr Ser Thr Ser Gly Ser Thr

1 5 10 15

Ser His Cys Arg Thr Gly Phe Trp Thr Leu Gly Val Pro Leu Pro Cys

20 25 30

Trp Tyr Ser Leu Ser Ser Gly Phe His Ser Thr Ser Pro Val Leu Gly

35 40 45

Thr Thr Ser Thr Trp Pro Thr Thr Ser Ser Arg Pro Phe Ser Cys Ser

50 55 60

Arg Tyr Cys Pro Arg Ala Pro Thr Leu Ser Cys His Pro His Ser Leu

65 70 75 80

His Thr Trp Gln Glu Gly Asp Ala Lys Pro Cys Val Leu Thr Gln Ala

85 90 95

Arg Ser Cys Leu Leu Gly Gly Glu Gly Cys Asp Arg Ala Ala Cys

100 105 110

Pro Gly Pro Gly Ala Arg Gly Arg Arg Ser Cys Arg Trp Pro Gly Gly

115 120 125

Met Glu Asn Met Pro Gln Glu Arg Ala Phe Asp Leu Ser Leu Ser Leu

130 135 140

Ala Cys Gln Trp Gly Lys Gln Arg Gly Val Gln Val Glu Gly Pro Lys

145 150 155 160

Asp Lys Ala Val Leu Gly Lys Pro

165

<210> 3496

<211> 144

<212> PRT

<213> Homo sapiens

<400> 3496

Met Asp Ser Ser Tyr Leu Asp Asn Gln Gly Ile Ala Pro Ser Lys Lys

1 5 10 15

Pro Met Pro Ser Tyr Lys Cys Gln Ser His Trp Ala Asn Gln Gln Thr

20 25 30

Leu Ser Gln Arg Ala Pro Leu Gly Phe Thr Gly Gln Trp Thr Asn Gln

35 40 45

Arg Arg Phe Gln Ser Ala Ser His Cys Gly Thr Ala Arg His Ser Leu

50 55 60

Cys Pro Ala Arg Ser Gly Thr Phe Leu Asp Pro Val Ser Ser Ile Ile

65 70 75 80

Leu Asp Cys Gln Leu Pro Glu Val Arg Lys Leu Ile Phe Tyr Phe Phe

85 90 95

Ser Leu Arg Leu Leu Asn Leu Phe Gln Leu His Leu Ser Thr Glu Leu

100 105 110

Ser Ser Tyr Gln Val Leu Arg His Ile Asn Asp Ala Asn Leu Val Pro

115 120 125

Phe Leu Val Trp Pro Asn Ser Lys Val Glu Glu Leu Gly Asn Lys Ser

130 135 140

<210> 3497

<211> 329

<212> PRT

<213> Homo sapiens

<400> 3497

Met	Lys	Leu	Ser	Val	Asn	Glu	Ala	Gln	Leu	Gly	Phe	Tyr	Leu	Gly	Ser
1				5			•		10					15	
Leu	Ser	His	Leu	Ser	Ala	Cys	Pro	Gly	Ile	Asp	Pro	Arg	Ser	Ser	Glu
			20					25					30		
Asp	Gln	Pro	Glu	Ser	Leu	Lys	Thr	Gly	Gln	Met	Met	Asp	Glu	Ser	Asp
		35					40					45			
Glu	Asp	Phe	Lys	Glu	Leu ⁻	Cys	Ala	Ser	Phe	Phe	Gln	Arg	Val	Lys	Lys
	50					55					60				
His	Gly	Ile	Lys	Glu	Val	Ser	Gly	Glu	Arg	Lys	Thr	Gln	Lys	Ala	Ala
65					70					75					80
Ser	Asn	Gly	Thr	Gln	Ile	Arg	Ser	Lys	Leu	Lys	Arg	Thr	Lys	Gln	Thr
				85					90					95	
Ala	Thr	Lys	Thr	Lys	Thr	Leu	Gln	Gly	Pro	Ala	Glu	Lys	Lys	Pro	Pro
			100					105					110		
Ser	Gly	Ser	Gln	Ala	Pro	Arg	Thr	Lys	Lys	Gln	Arg	Val	Thr	Lys	Trp
		115					120					125			
Gln	Ala	Ser	Glu	Pro	Ala	His	Ser	Val	Asn	Gly	Glu	Gly	Gly	Val	Leu
	130					135					140				
Ala	Ser	Ala	Pro	Asp	Pro	Pro	Val	Leu	Arg	Glu	Thr	Ala	Gln	Asn	Thr
145					150					155					160
Gln	Thr	Gly	Asn	Gln	Gln	Glu	Pro	Ser	Pro	Asn	Leu	Ser	Arg	Glu	Lys
				165					170					175	
Thr	Arg	Glu	Asn	Val	Pro	Asn	Ser	Asp	Ser	Gln	Pro	Pro	Pro	Ser	Cys
			180					185					190		
Leu	Thr	Thr	Ala	Val	Pro	Ser	Pro	Ser	Lys	Pro	Arg	Thr	Ala	Gln	Leu
		195					200					205			
Val	Leu	Gln	Arg	Met	Gln	Gln	Phe	Lys	Arg	Ala	Asp	Pro	Glu	Arg	Leu
	210					215					220				
Aro	His	Ala	Ser	Glu	Glu	Cvs	Ser	Len	Glu	Ala	Ala	Aro	Glu	Glu	Asn

Val Pro Lys Asp Pro Gln Glu Glu Met Met Ala Gly Asn Val Tyr Gly Leu Gly Pro Pro Ala Pro Glu Ser Asp Ala Ala Val Ala Leu Thr Leu Gln Gln Glu Phe Ala Arg Val Gly Ala Ser Ala His Asp Asp Ser Leu Glu Glu Lys Gly Leu Phe Phe Cys Gln Ile Cys Gln Lys Asn Leu Ser Ala Met Asn Val Thr Arg Arg Glu Gln His Val Asn Arg Trp Gly Gln Leu Gly Pro Ser Pro Leu Pro Cys Met

<210> 3498

<211> 179

<212> PRT

<213> Homo sapiens

<400> 3498

Lys Ala Thr Glu Thr Leu Thr Pro Glu Lys Lys His Arg Asp Arg Gly 70 65 75 Ser Arg Ser Ser Leu Cys His Cys Ser Ala Pro Glu Thr Pro Gln His 90 95 85 Gly Glu Arg Ala Gly Gly Ser His Glu Lys Pro Arg Ala Leu Thr Gly 105 110 100 Leu Leu Arg Gly Gly Arg Lys Ala Glu Thr Arg Pro Leu Glu Pro Pro 120 125 115 Val Arg Thr Gly Pro Val Glu Trp Ala Gln Tyr Val Arg Thr Gln Arg 130 135 140 Gly Arg Gln Ser Ile Gly Trp Gly Arg Leu Ser Leu Ile Phe Pro Arg 145 150 155 160 Phe Ser Leu Leu Ser Gly Ser Val Val Leu Ser Pro Pro Ile Phe Thr 170 175 165 Leu Val Ala

<210> 3499

<211> 303

<212> PRT

<213> Homo sapiens

<400> 3499

Met Thr Arg Ala Arg Ile Gly Cys Phe Gly Pro Gly Gly Arg Ala Arg

1 5 10 15

Gly Thr Glu Ser Ala Pro Glu Pro Ser Lys Arg Val Pro Pro Gly Arg

20 25 30

Ser Trp Gln Thr Gln Glu Val Arg Gln Thr Arg Gly Ala Asn Gly Leu

35		40		45	
Gly Pro Arg	Ala Gly Se	er Ala Gly	Ala Lys Ala P	ro Gly Pro Ala	Gln
50		55		60	
Gly Ala Ala	Gln His G	y Leu Gly	Gly Ser Ala G	ly Leu Arg Val	Arg
65		70	75		80
Val Ser Pro	Leu Ala Me	et Gly Ser	Ala Ala Leu G	lu Ile Leu Gly	Leu
	85		90	95	
Val Leu Cys	Leu Val G	y Trp Gly	Gly Leu Ile L	eu Ala Cys Gly	Leu
	100		105	110	
Pro Met Trp	Gln Val .Th	nr Ala Phe	Leu Asp His A	sn Ile Val Thr	Ala
115		120		125	
Gln Thr Thr	Trp Lys G	y Leu Trp	Met Ser Cys V	al Val Gln Ser	Thr
130		135	1	40	
Gly His Met	Gln Cys Ly	vs Val Tyr	Asp Ser Val L	eu Ala Leu Ser	Thr
145	15	50	155		160
Glu Val Gln	Ala Ala A	g Ala Leu	Thr Val Ser A	la Val Leu Leu	Ala
	165		170	175	
Phe Val Ala	Leu Phe Va	al Thr Leu	Ala Gly Ala G	In Cys Thr Thr	Cys
	180		185	190	
Val Ala Pro	Gly Pro A	a Lys Ala	Arg Val Ala L	eu Thr Gly Gly	Val
195		200		205	
Leu Tyr Leu	Phe Cys G	y Leu Leu	Ala Leu Val P	ro Leu Cys Trp	Phe
210		215	2	20	
Ala Asn Ile	Val Val A	g Glu Phe	Tyr Asp Pro S	er Val Pro Val	Ser
225	23	80	235		240
Gln Lys Tyr	Glu Leu G	y Ala Ala	Leu Tyr Ile G	ly Trp Ala Ala	Thr
	245		250	255	
Ala Leu Leu	Met Val G	y Gly Cys	Leu Leu Cys C	ys Gly Ala Trp	Val
	260		265	270	

Cys Thr Gly Arg Pro Asp Leu Ser Phe Pro Val Lys Tyr Ser Ala Pro Arg Arg Pro Thr Ala Thr Gly Asp Tyr Asp Lys Lys Asn Tyr Val <210> 3500 <211> 116 <212> PRT <213> Homo sapiens <400> 3500 Met Arg Asn Leu Gln Ser Ser Ile Gln Asn Trp Arg Arg His Thr Gln Thr Thr Leu Gln Gly Arg Leu Ala Ala Glu Ala Gly Pro Met Lys Lys Met Met Lys Lys Thr Met Arg Met Tyr His Val Tyr Tyr Trp Pro Gln Thr Thr Ser Pro Leu Pro Arg Val Ala His Arg Lys Gln Pro Ala Pro Phe Phe Leu Phe Ser Pro Thr Thr His His Pro Ser Leu Gln Thr Leu Pro Pro Thr Arg Leu Gly Cys Arg Val Cys Glu Ala Ala Gln Lys Val Cys Lys Ser Pro Leu Cys Leu Ile Cys Val Phe Pro Arg Lys Arg Ala Gly Ser Leu

<210> 3501 <211> 114 <212> PRT <213> Homo sapiens <400> 3501 Met Phe His His Gln Gln Ala Tyr Cys Leu Ala Pro Phe Asp Leu Ile 5 1 10 15 Lys Val Arg Leu Gln Asn Gln Thr Glu Pro Arg Ala Gln Pro Gly Ser 20 25 30 Pro Pro Pro Arg Tyr Gln Gly Pro Val His Cys Ala Ala Ser Ile Phe 35 40 45 Arg Glu Glu Gly Pro Arg Gly Leu Phe Arg Gly Ala Trp Ala Leu Thr 50 55 60 Leu Arg Asp Thr Pro Thr Val Gly Ile Tyr Phe Ile Thr Tyr Glu Gly 65 70 75 80 Leu Cys Arg Gln Tyr Thr Pro Glu Gly Gln Asn Pro Ser Ser Ala Thr 85 90 95 Val Leu Trp Gln Gly Ala Leu Gln Ala Leu Leu Pro Gly Trp Gln Pro 100 105 110

<210> 3502

Arg Pro

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3502

Met Ala Gly Thr Leu Asp Leu Asp Lys Gly Cys Thr Val Glu Glu Leu

1 5 10 15

Leu Arg Gly Cys Ile Glu Ala Phe Asp Asp Ser Gly Lys Val Arg Asp

20 25 30

Pro Gln Leu Val Arg Met Phe Leu Met Met His Pro Trp Tyr Ile Pro

35 40 45

Ser Ser Gln Leu Ala Ala Lys Leu Leu His Ile Tyr Gln Gln Ser Arg

50 55 60

Lys Asp Asn Ser Asn Ser Leu Gln Val Lys Thr Cys His Leu Val Arg

65 70 75 80

Tyr Trp Ile Ser Ala Phe Pro Ala Glu Phe Asp Leu Asn Pro Glu Leu

85 90 95

Ala Glu Gln Ile Lys Glu Leu Lys Ala Leu Leu Asp Gln Glu Gly Asn

100 105 110

Arg Arg His Ser Ser Leu Ile Asp Ile Asp Ser Val Cys Val Gly Gly

115 120 125

Ala Gln Arg Ala Gly Gly Ala Leu Ser Ile Leu Tyr His Leu Cys Leu

130 135 140

Ile Asn Val Cys

145

<210> 3503

<211> 599

<212> PRT

<213> Homo sapiens

<400> 3503
Met Glu His Phe Leu Leu Glu Val Ala Ala Ala Pro Leu Arg Leu Ile
1 5 10 15
Ala Ala Lys Asp Glu Lys Ser Arg Ser Glu Leu Gly Arg Phe Leu Ala

Ala Ala Lys Asn Glu Lys Ser Arg Ser Glu Leu Gly Arg Phe Leu Ala
20 25 30

Lys Gln Val Trp Thr Pro Gln Asp Arg Gln Cys Val Leu Ser Thr Leu
35 40 45

Ala Gln Leu Leu Leu Asp Lys Asp Cys Thr Val Leu Val Gly Arg Gln 50 55 60

Leu Arg Pro Leu Leu Leu Asp Leu Leu Glu Arg Asn Ala Glu Ala Ile
65 70 75 80

Lys Ala Gly Gly Gln Ile Asn His Asp Leu His Glu Arg Leu Cys Val 85 90 95

Ser Met Ser Lys Leu Ile Gly Asn His Pro Asp Val Leu Pro Phe Ala 100 105 110

Leu Arg Tyr Phe Lys Asp Thr Ser Pro Val Phe Gln Arg Leu Phe Leu
115 120 125

Glu Ser Ser Asp Ala Asn Pro Val Arg Tyr Gly Arg Arg Met Lys 130 135 140

Leu Arg Asp Leu Met Glu Ala Ala Phe Lys Phe Leu Gln Gln Glu Gln 145 150 155 160

Ser Val Phe Arg Glu Leu Trp Asp Trp Ser Val Cys Val Pro Leu Leu 165 170 175

Arg Ser His Asp Thr Leu Val Arg Trp Tyr Thr Ala Asn Cys Leu Ala 180 185 190

Leu Val Thr Cys Met Asn Glu Glu His Lys Leu Ser Phe Leu Lys Lys
195 200 205

Ile Phe Asn Ser Asp Glu Leu Ile His Phe Arg Leu Arg Leu Glu 210 215 220

Glu	Ala	Gln	Leu	Gln	Asp	Leu	Glu	Lys	Ala	Leu	Val	Leu	Ala	Asn	Pro
225					230			-		235	-		-		240
Glu	Val	Ser	Leu	Trp	Arg	Lys	Gln	Lys	Glu	Leu	Gln	Tyr	Leu	Gln	Gly
				245					250					255	
His	Leu	Val	Ser	Ser	Asp	Leu	Ser	Pro	Arg	Val	Thr	Ala	Val	Cys	Gly
			260					265					270		
Val	Val	Leu	Pro	Gly	Gln	Leu	Pro	Ala	Pro	Gly	Glu	Leu	Gly	Gly	Asr
		275					280					285			
Arg	Ser	Ser	Ser	Arg	Glu	Gln	Glu	Leu	Ala	Leu	Arg	Ser	Tyr	Val	Leu
	290					295					300				
Val	Glu	Ser	Val	Cys	Lys	Ser	Leu	Gln	Thr	Leu	Ala	Met	Ala	Val	Ala
305					310					315					320
Ser	Gln	Asn	Ala	Val	Leu	Leu	Glu	Gly	Pro	Ile	Gly	Cys	Gly	Lys	Thi
				325					330					335	
Ser	Leu	Val	Glu	Tyr	Leu	Ala	Ala	Val	Thr	Gly	Arg	Thr	Lys	Pro	Pro
			340					345					350		
Gln	Leu	Leu	Lys	Val	Gln	Leu	Gly	Asp	Gln	Thr	Asp	Ser	Lys	Met	Leı
		355					360					365			
Leu	Gly	Met	Tyr	Arg	Cys	Thr	Asp	Val	Pro	Gly	Glu	Phe	Val	Trp	Glr
	370					375					380				
Pro	Gly	Thr	Leu	Thr	Gln	Ala	Ala	Thr	Met	Gly	His	Trp	Ile	Leu	Leu
385					390					395					400
Glu	Asp	Ile	Asp	Tyr	Ala	Pro	Leu	Asp	Val	Val	Ser	Val	Leu	Ile	Pro
				405					410					415	
Leu	Leu	Glu	Asn	Gly	Glu	Leu	Leu	Ile	Pro	Gly	Arg	Gly	Asp	Cys	Leu
			420					425					430		
Lys	Val	Ala	Pro	Gly	Phe	Gln	Phe	Phe	Ala	Thr	Arg	Arg	Leu	Leu	Ser
		435					440					445			
Cvs	Glv	Glv	Asn	Trp	Tvr	Arg	Pro	Leu	Asn	Ser	His	Ala	Thr	Leu	Lei

450 455 460

Asp Lys Tyr Trp Thr Lys Ile His Leu Asp Asn Leu Asp Lys Arg Glu

465 470 475 480

Leu Asn Glu Val Leu Gln Ser Arg Tyr Pro Ser Leu Leu Ala Val Val

485 490 495

Asp His Leu Leu Asp Ile Tyr Ile Gln Leu Thr Gly Glu Lys His His

500 505 510

Ser Trp Ser Asp Ser Ser Val Gly Cys Glu Gln Ala Pro Glu Glu Val

515 520 525

Ser Glu Ala Arg Arg Glu Asn Lys Arg Pro Thr Leu Glu Gly Arg Glu

530 535 540

Leu Ser Leu Arg Tyr Trp Thr Lys Gln Phe Phe Leu Phe Phe Leu Ser

545 550 555 560

Phe Phe Phe Val Arg Gln Ile Pro Ala Leu Leu Pro Arg Leu Glu Cys

565 570 575

Ser Gly Ala Val Leu Ala His Ser Asn Leu Arg Leu Leu Gly Ser Lys

580 585 590

Phe Leu Pro Ala Arg Ser Lys

595

<210> 3504

<211> 149

<212> PRT

<213> Homo sapiens

<400> 3504

Met Ser Ser Glu Glu Ser Gly Thr Ser Ile Ser Leu Leu Pro Ala Leu

1 5 10 15

Ser Leu Ala Ala Pro Asp Pro Gly Gln Arg Ser Ser Ser Gln Pro Ser Pro Ala Ile Cys Ser Ala Pro Ala Thr Leu Thr Pro Arg Ser Pro His Ala Ser Arg Thr Pro Ser Ser Pro Leu Gln Ser Cys Thr Pro Ser Leu Ser Pro Arg Ser His Val Pro Ser Pro His Gln Ala Leu Val Thr Arg Pro Gln Lys Pro Ser Leu Glu Phe Lys Glu Phe Val Gly Leu Pro Cys Lys Asn Arg Pro Pro Phe Pro Arg Thr Gly Ala Thr Arg Gly Ala Gln Glu Pro Cys Ser Val Trp Glu Pro Pro Lys Arg His Arg Asp Gly Ser Ala Phe Gln Tyr Glu Tyr Glu Pro Pro Cys Thr Ser Leu Cys Ala Arg Val Gln Ala Val Arg

<210> 3505

<211> 107

<212> PRT

<213> Homo sapiens

<400> 3505

Met Ser His Thr Ser His Leu Thr Leu Lys Ile Cys Val Ile His Arg

Pro Thr Leu Arg Tyr Leu Thr Leu Ile Ala Tyr Arg Gln His Val Arg

Ala Pro Arg Gly Arg Cys Ser His Pro Asp Lys Lys Ser Ala Ala Leu
35 40 45

Val Leu Arg Ile Leu Phe Pro Arg Thr Glu Ala Leu Pro Ser Thr Ile
50 55 60

Ser Leu Ala Leu Ala Glu Ser Ser Ser Pro Ile Ala Ser Leu Ser Ser

65 70 75 80

The See His Ala Ala Leu Arg Pro Cln Cly Asp Cly Cly Arg Cly Val

Thr Ser His Ala Ala Leu Arg Pro Gln Gly Asp Gly Gly Arg Gly Val
85 90 95

Glu Thr Arg Met Glu Trp Asn Ile Phe Ile Lys
100 105

<210> 3506

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3506

Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro

1 5 10 15

Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly
20 25 30

Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu
35 40 45

Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe
50 55 60

Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro 65 70 75 80

Lys	Gln	Gly	Lys	Arg	Leu	Asn	Phe	Thr	Gln	Ser	Tyr	Ser	Leu	Gln	Leu
				85					90			-		95	
Ser	Asn	Leu	Lys	Met	Glu	Asp	Thr	Gly	Ser	Tyr	Arg	Ala	Gln	Ile	Ser
			100					105					110		
Thr	Lys	Thr	Ser	Ala	Lys	Leu	Ser	Ser	Tyr	Thr	Leu	Arg	Ile	Leu	Arg
		115					120					125			
Gln	Leu	Arg	Asn	Ile	Gln	Val	Thr	Asn	His	Ser	Gln	Leu	Phe	Gln	Asn
	130					135					140				
Met	Thr	Cys	Glu	Leu	His	Leu	Thr	Cys	Ser	Val	Glu	Asp	Ala	Asp	Asp
145					150					155					160
Asn	Val	Ser	Phe	Arg	Trp	Glu	Ala	Leu	Gly	Asn	Thr	Leu	Ser	Ser	Gln
				165					170					175	
Pro	Asn	Leu	Thr	Val	Ser	Trp	Asp	Pro	Arg	Ile	Ser	Ser	Glu	Gln	Asp
			180					185					190		
Tyr	Thr	Cys	Ile	Ala	Glu	Asn	Ala	Val	Ser	Asn	Leu	Ser	Phe	Ser	Val
		195					200					205			
Ser	Ala	Gln	Lys	Leu	Cys	Glu	Asp	Val	Lys	Ile	Gln	Tyr	Thr	Asp	Thr
	210					215					220				
Lys	Met	Ile	Leu	Phe	Met	Val	Ser	Gly	Ile	Cys	Ile	Val	Phe	Gly	Phe
225					230					235					240
Ile	Ile	Leu	Leu	Leu	Leu	Val	Leu	Arg	Lys	Arg	Arg	Asp	Ser	Leu	Ser
				245					250					255	
Leu	Ser	Thr	Gln	Arg	Thr	Gln	Gly	Pro	Glu	Ser	Ala	Arg	Asn	Leu	Glu
			260					265					270		
Tyr	Val	Ser	Val	Ser	Pro	Thr	Asn	Asn	Thr	Val	Tyr	Ala	Ser	Val	Thr
		275					280					285			
His	Ser	Asn	Arg	Glu	Thr	Glu	Ile	Trp	Thr	Pro	Arg	Glu	Asn	Asp	Thr
	290					295					300				
۵۱ ا	Thr	TΙΔ	Tur	Sar	Thr	T۱۵	Acn	Ніс	Sar	Tue	Glu	Sar	Lvc	Pro	Thr

305 310 315 320

Phe Ser Arg Ala Thr Ala Leu Asp Asn Val Val
325 330

<210> 3507

<211> 160

<212> PRT

<213> Homo sapiens

<400> 3507

Met Pro Ala Ile Ser Val Ser Pro Ser Leu Gln Lys Tyr Ser Lys Gln

1 5 10 15

Gln Lys Leu Asn Thr Tyr Glu Val Asn Thr Lys Asp Leu His Arg Lys

20 25 30

Ile Ser Gly Ser Ser Val Asp Ala Ile Ala His Cys Ser Ala Gly Gln

35 40 45

Ser Ser Gly Leu Ser Phe Asp Phe Gly Pro Val Leu Gln Asn Gln Gln

50 55 60

Pro Phe Ser Gln Lys Thr Val Glu Cys Ser Gln Asp His Leu Trp Lys

65 70 75 80

Val Asn Tyr Ser Ile Phe Asn Leu Leu Pro Trp Ala Met Met Ser Glu

85 90 95

Thr Gln His Gly Gly Arg Thr Ser Ser Cys Val Gly Asn Leu Ser Glu

100 105 110

Pro Pro Trp Arg Pro Pro Lys Trp Leu Trp Gln Ser Cys Arg Gly Gly

115 120 125

Gly Asn Lys Lys Gly Asp Thr Trp Leu Ser Phe Leu Asn Gln Leu Thr

130 135 140

Met Gly Thr His Leu Tyr Trp Asn Phe Arg Val Arg Lys Tyr Gln Asn 145 150 155 160

<210> 3508

<211> 162

<212> PRT

<213> Homo sapiens

<400> 3508

Met Lys Ser Cys Ser Leu Ala Gly Ala Gly Val Gln Trp His Asp Phe

1 5 10 15

Gly Ser Leu Gln Pro Pro Pro Pro Ser Phe Arg Arg Phe Ser Cys Leu 20 25 30

Thr Leu Pro Arg Ala Gly Ile Thr Gly Val His His Ser Trp Leu
35 40 45

Ile Phe Val Phe Leu Val Gln Met Arg Phe His His Val Gly Gln Ala 50 55 60

Gly Phe Glu Leu Met Thr Leu Ser Gly Leu Pro Ala Leu Ala Ser Gln
65 70 75 80

Asn Ala Gly Ile Thr Gly Met Ser Tyr Tyr Ala Trp Pro Gly Leu Ile

85 90 95

Leu Glu Ile Asp Arg Leu Cys Val Ala Leu Ala Thr Val Gln Trp Leu
100 105 110

Phe Thr Ala Val Ile Met Ala His Arg Ser Pro Lys Leu Lys Val Gly
115 120 125

Ser Ser Cys Leu Pro IIe Ser Ala Phe Leu Val Ala Arg Thr Thr Gly
130 135 140

Thr Leu His His Thr Gln Leu Val Leu Gly Val Leu Ser Lys Leu Asp

145 150 155 160

Thr Trp

<210> 3509

<211> 145

<212> PRT

<213> Homo sapiens

<400> 3509

Met Ala Lys Glu Ile Lys Ser Asn Arg Gln Glu Arg Gly Ala Thr Gly

1 5 10 15

Leu Val Asn Ser Gln Thr Glu Leu Val Ile Gly Gln Trp Lys Val Asp

20 25 30

Cys Ser Thr Phe Pro Phe Leu Lys Val Val Cys Tyr Lys Glu Pro Pro

35 40 45

Leu His Val Arg Ala Ala Leu Asp Ser Leu Ser Phe Ile His Met Ser

50 55 60

Glu Gly Leu Cys Ser Arg Ala Met Arg Glu Glu Phe Ala Thr Leu Arg

65 70 75 80

Ala Val Ser Trp Asn Pro Gly Ala Pro Phe His Val Ser Leu Gly Ala

85 90 95

Glu Arg Val Thr His Val Trp Glu Trp Tyr Val Trp Gln Ser Met Trp

100 105 110

Ala Phe Gly Phe Leu His Trp Cys Ala His Ile Leu Cys Pro Met Ile

115 120 125

Phe Asn Leu Asp Lys Glu Ile Asp Ile Cys Phe Pro His Leu Gly Asp

130 135 140

Lys

145

<210> 3510

<211> 606

<212> PRT

<213> Homo sapiens

<400> 3510

Met Phe Gly Asn Glu Cys Cys Phe Ser Thr Gly Glu Val Ile Lys Ile

1 5 10 15

Thr Gly Leu Lys Val Lys Lys Ile Ile Ala Glu Ile Cys Glu Gln Ile

20 25 30

Glu Gly Cys Glu Phe Leu Gln Pro Phe Glu Leu Pro Met Asn Phe Pro
35 40 45

Gly Leu Phe Lys Ile Val Ala Asp Lys Thr Pro Tyr Leu Thr Met Glu
50 55 60

Glu Ile Thr Arg Thr Ile His Ile Gly Pro Ser Arg Leu Gly His Pro
65 70 75 80

Cys Phe Tyr His Gln Lys Asp Ile Lys Leu Glu Asn Leu Ile Ile Lys

85

90

95

Gln Gly Glu Gln Ile Met Leu Asn Ser Val Glu Glu Ile Asp Gly Glu
100 105 110

Ile Met Val Ser Cys Ala Val Ala Arg Asn His Gln Thr His Ser Phe 115 120 125

Asn Leu Pro Leu Ser Gln Glu Gly Glu Phe Tyr Glu Cys Glu Asp Glu
130 135 140

Arg Ile Tyr Thr Leu Lys Glu Ile Val Glu Trp Lys Ile Pro Lys Asn

145					150					155					160
Arg	Thr	Arg	Thr	Val	Åsn	Leu	Thr	Asp	Phe	Ser	Asn	Lys	Trp	Asp	Ser
				165					170					175	
Thr	Asn	Pro	Phe	Pro	Lys	Asp	Phe	Cys	Gly	Thr	Leu	Ile	Leu	Lys	Pro
			180					185	•				190		
Val	Tyr	Glu	Ile	Gln	Gly	Val	Met	Lys	Phe	Arg	Lys	Asp	Ile	Ile	Arg
		195			•		200					205			
Ile	Leu	Pro	Ser	Leu	Asp	Val	Glu	Val	Lys	Asp	Ile	Thr	Asp	Ser	Tyr
	210					215					220				
Asp	Ala	Asn	Trp	Phe	Leu	Gln	Leu	Leu	Ser	Thr	Glu	Asp	Leu	Phe	Glu
225					230					235					240
Met	Thr	Ser	Lys	Glu	Phe	Pro	Ile	Val	Thr	Glu	Val	Ile	Glu	Ala	Pro
				245					250					255	
Glu	Gly	Asn	His	Leu	Pro	Gln	Ser	Ile	Leu	Gln	Pro	Gly	Lys	Thr	Ile
			260					265					270		
Val	Ile	His	Lys	Lys	Tyr	Gln	Ala	Ser	Arg	Ile	Leu	Ala	Ser	Glu	Ile
		275					280					285			
Arg	Ser	Asn	Phe	Pro	Lys	Arg	His	Phe	Leu	Ile	Pro	Thr	Ser	Tyr	Lys
	290					295					300				
Gly	Lys	Phe	Lys	Arg	Arg	Pro	Arg	Glu	Phe	Pro	Thr	Ala	Tyr	Asp	Leu
305					310					315					320
Glu	Ile	Ala	Lys	Ser	Glu	Lys	Glu	Pro	Leu	His	Val	Val	Ala	Thr	Lys
				325					330					335	
Ala	Phe	His		Pro	His	Asp	Lys	Leu	Ser	Ser	Val	Ser		Gly	Asp
			340					345					350		
Gln	Phe	Leu	Val	His	Gln	Ser	Glu	Thr	Thr	Glu	Val	Leu	Cys	Glu	Gly
		355					360					365			
Ile	Lys	Lys	Val	Val	Asn	Val	Leu	Ala	Cys	Glu		Ile	Leu	Lys	Lys
	370					375					380				

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Ser	Tyr	Glu	Ala	Ala	Leu	Leu	Pro	Leu	Tyr	Met	Glu	Gly	Gly	Phe	Val
385	-	-		-	390	-				395					400
Glu	Val	Ile	His	Asp	Lys	Lys	Gln	Tyr	Pro	Ile	Ser	Glu	Leu	Cys	Lys
				405					410					415	
Gln	Phe	Arg	Leu	Pro	Phe	Asn	Val	Lys	Val	Ser	Val	Arg	Asp	Leu	Ser
			420					425					430		
Ile	Glu	Glu	Asp	Val	Leu	Ala	Ala	Thr	Pro	Gly	Leu	Gln	Leu	Lys	Glu
		435					440					445			
Asp	Ile	Thr	Asp	Ser	Tyr	Leu	Leu	Ile	Ser	Asp	Phe	Ala	Asn	Pro	Thr
	450					455					460				
Glu	Cys	Trp	Glu	Ile	Pro	Val	Gly	Arg	Leu	Asn	Met	Thr	Val	Gln	Leu
465					470					475					480
Val	Ser	Asn	Phe	Ser	Arg	Asp	Ala	Glu	Pro	Phe	Leu	Val	Arg	Thr	Leu
				485					490					495	
Val	Glu	Glu	Ile	Thr	Glu	Glu	Gln	Tyr	Tyr	Met	Met	Arg	Arg	Tyr	Glu
			500					505					510		
Ser	Ser	Ala	Ser	His	Pro	Pro	Pro	Arg	Pro	Pro	Lys	His	Pro	Ser	Val
		515					520					525			
Glu	Glu	Thr	Lys	Leu	Thr	Leu	Leu	Thr	Leu	Ala	Glu	Glu	Arg	Thr	Val
	530					535					540				
Asp	Leu	Pro	Lys	Ser	Pro	Lys	Arg	His	His	Val	Asp	Ile	Thr	Lys	Lys
545					550					555					560
Leu	His	Pro	Asn	Gln	Ala	Gly	Leu	Asp	Ser	Lys	Val	Leu	Ile	Gly	Ser
				565					570					575	
Gln	Asn	Asp	Leu	Val	Asp	Glu	Glu	Lys	Glu	Arg	Ser	Asn	Arg	Gly	Ala
			580				-	585					590		
Thr	Ala	Val	Ala	Glu	Thr	Phe	Lys	Asn	Glu	Lys	His	Gln	Lys		
		595					600					605			

<210> 3511

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3511

Met Glu Met Trp Glu Arg Gln Leu Phe Leu Thr Thr Gln Pro Ser Pro

1 5 10 15

Leu Pro Gly Gly Thr Pro Arg Asn Glu Ala Leu Pro Leu Arg Glu Phe

20 25 30

Pro Ala Thr Pro Ser Leu Gly Pro Gly Met Ala Ala Val Arg Ala Pro

35 40 45

Ala Pro Ser Gly Asp Ser Leu Gly Thr Asn Tyr His Arg Pro Trp Ala

50 55 60

Thr Ser Lys Ala Ala His Thr Asp Thr Pro Ser Leu Val Thr Ser Pro

65 70 75 80

Gln Glu Glu Gly His Pro Arg Lys Gly Gly Arg Leu Pro Gly Leu Glu

85 90 95

Pro Leu Gln Gly Leu Thr Arg His

100

<210> 3512

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3512

Met Glu Ala Gly Cys Lys Leu Lys Leu Lys Pro Pro Leu Tyr Phe Ser Ser Thr Ile Gly Phe Glu Ser Pro Asp Gly Ser Ser Tyr Pro His Phe Lys Pro Cys Leu Leu Thr Ile Ser Ser Cys Ser Leu Thr Gln Ser Pro Ala Met Ala Ser Ser Leu Ser Ser Thr Val Lys Gly Arg Leu Phe Thr Gln Ala His Lys Thr Leu Asp Tyr His Ser Pro Val Ile Leu Leu Ser Tyr Cys Ser Leu Leu Tyr Leu Ser Pro Leu Lys Pro Pro Trp Pro Pro Pro Ile Leu Val Ser Leu His <210> 3513 <211> 244 <212> PRT <213> Homo sapiens <400> 3513 Met Ser His Arg Ala Trp Pro Thr Ser Ala Leu Leu Asn Leu Ser Ser Leu Ser Leu Thr Leu Pro Gln Trp Leu Leu Tyr Gln Pro Thr Lys Lys Ala Pro Leu Pro Thr Leu Ala Gly Gln Arg Ala His Ser Leu Pro Ser

His Lys Pro Val Pro His Ala Trp Ala Leu Leu Arg Pro Lys Gln Pro

Ser Ser Asn Ser Glu Glu Asn Pro Glu Leu Leu Leu Thr Val Val Ile His Pro Leu Asn Ala Tyr Cys Gly Ser Pro Glu Thr Ile Thr Trp Leu Ala Ser Val Asn Ser His Asn Ser Phe Gln Cys Tyr His Ser Cys Val Cys Pro Leu Leu Pro Trp Leu Ser Pro Arg Tyr Phe Leu Gln Asp Ser Val Pro Ser Leu Val Ser Gly Phe Ser Arg Tyr Leu Pro Met Ala Cys Leu Gly Pro Ala Ser Gly Asn Pro Ala Trp Ile Val Ala Arg Lys Gly Cys Glu Asp Trp Met Pro Pro Phe Val Phe Val Phe Ser Phe Ile Pro Ser Phe Leu Ser Ser Leu Pro Ser Phe Leu Pro Leu Ser Leu Ser Leu Ser Phe Phe Leu Ser Leu Phe Leu Phe Leu Cys Leu Phe Phe Phe Leu Phe Phe Arg Thr Cys His Pro Gly Trp Ser Ala Val Ala Gln Ser Trp Leu Thr Thr Ile Ser Ala Ser Gln Ile Gln Ala Ile Leu Arg Pro

<210> 3514

Gln Pro Pro Lys

<211> 108

<212> PRT

<213> Homo sapiens

<400> 3514

Met Arg Val Pro Val Leu Tyr Pro Phe Gln His Leu Val Leu Ser Val

1 5 10 15

Lys Lys Ile Ile Leu Val Ser Met Gln Trp Tyr Leu Ile Lys Asp Thr

20 25 30

Gln Met Ala Asn Lys Gln Met Lys Arg Cys Ser Ile Ser Leu Ala Thr

35 40 45

Gly Glu Met Gln Ile Lys Thr Thr Val Arg Tyr His Phe Thr Pro Thr

50 55 60

Arg Phe Thr Ile Ile Lys Arg Trp Lys Ile Thr Ser Val Asp Lys Asn

65 70 75 80

Leu Glu Lys Met Glu Pro Ser Tyr Thr Ile Gly Gly Asn Val Gly Trp

85 90 95

Cys Ser Cys Ser Glu Lys Gln Phe Leu Thr Leu Gly

100 105

<210> 3515

<211> 110

<212> PRT

<213> Homo sapiens

<400> 3515

Met Glu Ala Arg Pro Pro Pro Glu Arg Gly Ser Leu Lys Ile Ile Leu

1 5 10 15

Thr Ser Leu Ser Ser Val Leu Thr Ser Leu Asp Cys Ile Leu Ser Phe

20 25 30

His Leu Arg Ser Ser Trp Phe Trp Leu Ala Ser Ser Asp Ile Thr Pro
35 40 45

Ala Glu Glu Arg Glu Gly Thr Arg Cys Ile Thr Ala Trp Ser Gln Gly
50 55 60

Pro Arg Leu Ile Cys Leu His Ser Thr Phe Gln Ser Leu Met Phe Val
65 70 75 80

Leu Cys Ile Leu Ser Arg Gly Phe Arg Ser Leu Ser Arg Lys Asn Arg 85 90 95

Glu Lys Tyr Val Tyr Ser Ser Leu Met Glu Val Glu Phe Ser
100 105 110

<210> 3516

<211> 124

<212> PRT

<213> Homo sapiens

<400> 3516

Met Leu Leu Glu Gly Arg Asp Gly Thr Ser Ile His Leu Val Asn Asn
1 5 10 15

Cys Gly Leu Ser Ser Val Ser Met Pro Ala Thr Val Leu Ser Ser Asp 20 25 30

His Thr Ala Val Asn Arg Ile Asp Glu Leu Ser Leu Ser Ser Trp Ser
35 40 45

Ser Gln Pro Ser Gly Glu Asp Arg Tyr Ile Gly Asn Lys Phe Leu Ile 50 55 60

Ala Ser Lys Gly Ala Ser Pro Lys Lys His Gln Val Thr Gly Tyr Arg
65 70 75 80

Thr Met Trp Asp Gly Pro Gly Arg Val Cys Glu Phe Pro Val Ala Ala
85
90
95

Val Thr Asn Tyr His Lys Phe Ser Gly Leu Lys Leu Ile Lys Met Gly
100
105
110

Arg Val Gln Trp Leu Met Pro Val Ile Pro Ala Leu

120

<210> 3517

<211> 145

<212> PRT

<213> Homo sapiens

115

<400> 3517

Met Pro Phe Ala Trp Pro Ala Pro Glu Trp Pro Gln Cys Gly Arg Ala
1 5 10 15

Ala Glu Ala Pro Arg His Gln Cys Asp Pro Val Ser Thr Ala Cys Ser
20 25 30

Leu Trp Thr Pro Phe Ser Ser His Gly Pro Pro Arg His Ser Ala Pro
35 40 45

Gly Pro Ser Ala Phe Pro Gln Leu Ala Leu Trp Lys Cys Gly Gln Gln 50 55 60

Cys Phe Gln Ser Pro Ser Ala Trp Val Cys Pro Val Phe Pro Cys Val 65 70 75 80

Asp Glu Gly Pro Ala Leu Leu Ala Gly Ala Ala Leu Asp Thr Pro Phe
85 90 95

Pro Arg His Ser Pro Gly Leu Ala His Met Gln Leu Arg Ser Arg Gly
100 105 110

Met Leu Thr Gln Arg Leu Val Gly Ala Ala Ser Thr Asp Phe Ser Leu

Glu Ser Ser Cys Leu Leu Phe Ile Val Ser Arg Cys Leu Arg Glu Ile Pro <210> 3518 <211> 100 <212> PRT <213> Homo sapiens <400> 3518 Met Phe Lys Lys Asn Gly Ser Phe Arg Asn Asp Lys Leu Phe His Pro Ile Thr Pro Asn Thr Cys Gly Ser Asp Ser Ser Leu His Leu Tyr Ile Leu Tyr Leu His Trp Pro Asp His Pro Arg Thr Thr Tyr Leu Thr Ser Ala Pro Phe Cys Leu Leu Thr Gln His Ser Leu Ser Leu Ser Phe Ser Leu Pro Leu Pro Leu Pro Arg Pro Ser Val Thr His Thr His

Thr His Thr His Arg Leu His Asn Ala His Arg Asn Val Leu

Ile Pro Phe Val

<210> 3519

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3519

Met Gly Gly Arg Ser His Pro Gln Pro Ala Gly Thr Arg Trp Arg Leu

1 5 10 15

Lys Ser Leu Ser Thr Leu Thr Leu Val His Leu Thr Gly Thr Leu Thr

20 25 30

Ser Ile Ser Lys Thr Trp Ser Leu Arg Thr Pro Cys Leu Gln Arg Leu

35 40 45

Leu Ile Ser Ser Arg Val Leu Gly Ile Gln Gly Arg Gly Gln Pro Gly

50 55 60

Trp Thr Gly Ser Trp Glu Gly Val Ser Trp Gln Pro Pro Gly Gln Thr

65 70 75 80

Asp Leu Pro Ala Cys Gln Arg Gln Pro Val Leu Pro Ala Pro Thr Arg

85 90 95

Thr Ser Ser Gln Ala Arg Cys

100

<210> 3520

<211> 105

<212> PRT

<213> Homo sapiens

<400> 3520

Met Arg Ile Leu Val Ile Pro His Leu Gln Gln His Leu Gly Tyr Phe

Thr Trp Phe Ile Ile Cys Ile Ser Leu Met Thr Asn Glu Arg His Phe Val Ile Tyr Val Phe Asp Val Tyr Leu Ser Ser Ile Val Lys Cys Leu Phe Lys Ser Phe Asp His Ile Leu Ile Gly Gln Leu Phe Phe Leu Leu Leu Asn Tyr Ser Pro Leu Ser Ile Leu Asn Thr Ile Pro Ser Ser Asp Met Arg Ser Val Asn Ile Phe Ser Gln Ala Ala Ala Cys Leu Phe Ile Phe Leu Leu Val Tyr Phe Val Lys Phe <210> 3521 <211> 128 <212> PRT <213> Homo sapiens

<400> 3521 Met Ser Gly Ser Ser Arg Met Gly Thr Thr Thr Ser Arg Ser Gly Ser Glu Pro Pro Ala Val Arg Pro Ala Lys Ala Arg Val Arg Met Pro Ser Arg Ser Met Ala Pro Gly Ser Ala Pro Pro Arg Cys Gly Lys Gly Leu Gly Arg Ala Leu Arg Pro Leu Pro Arg Ser Pro Cys Ser Pro His Ser

Gly Thr Ala Asn Ala Thr Gly Gln Pro Ala Val Pro Arg Lys Glu Ser 65 70 75 80 Gln Gly Arg Glu Thr Pro Pro Arg Ala Ala Ser Val His Pro Ala Ala 90 85 95 Arg Ala Ser Tyr Leu Cys Leu Ser Lys Gln Ser Ala Pro Trp Glu Leu 100 105 110 Lys Tyr Asn Arg Cys Gln Val Gln Gly Arg Arg Phe Ala Ala Glu Asn 115 120 125

<210> 3522

<211> 103

<212> PRT

<213> Homo sapiens

<400> 3522

Met Tyr Gln Gly Lys Glu Gly Arg Lys Arg Arg Ser Arg Ser Arg Asp

1 5 10 15

Ser Gly Glu Leu Gly Leu Ser Pro Ala Ala Val Leu Arg Val Ser Leu
20 25 30

Asn Cys Pro Trp Ala Ala Ser Leu Glu Val Leu Lys Gly Ser Leu Glu
35 40 45

Gly Asn Lys Trp Pro Leu Cys Val Glu Ala Leu Val Arg Val Tyr Lys
50 55 60

Ser Lys Thr Gln Leu Gly Ala Val Ala His Ala Cys Asn Pro Ser Arg
65 70 75 80

Gly Arg Gln Ile Thr Trp Gly Gln Glu Phe Glu Thr Ser Leu Ala Asn 85 90 95

Val Val Lys Pro Arg Leu Tyr

100

<210> 3523

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3523

Met Ala Trp Ile Pro Leu Phe Leu Gly Leu Leu Ala Tyr Cys Thr Gly

1 5 10 15

Ser Val Ala Ser Tyr Asp Leu Ile Gln Thr Pro Ser Leu Ser Val Ser

20 25 30

Pro Gly Leu Thr Ala Thr Ile Thr Cys Ser Gly Asp Arg Leu Gly Ser

35 40 45

Arg Phe Val Ser Trp Tyr Gln Gln Arg Ser Gly Gln Ser Pro Val Val

50 55 60

Val Leu Phe Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe

65 70 75 80

Ser Gly Ser Asn Ser Gly Asp Thr Ala Thr Leu Asn Ile Thr Gly Ala

85 90 95

Gln Thr Leu Asp Glu Ala His Tyr Tyr Cys Gln Val Trp Asp Ala Asp

100 105 110

Thr Gly Val Ile Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Glu

115 120 125

Thr Leu Cys Val Ile Ser Phe Phe Val Cys Pro Leu Ser Asn Glu Asp

130 135 140

Gln Ser Phe Ser Leu His Ser Arg Pro Asp Arg Gly Pro Leu Ser Ser

145 150 155 160

Leu Leu Arg Pro Ser Ile Gly Ser Pro Arg Arg His Thr His Ser Met
165 170 175

Thr Asp Thr Arg Val Arg Gly Gln Asp Gly Val Ala Tyr
180 185

<210> 3524

<211> 143

<212> PRT

<213> Homo sapiens

<400> 3524

Met Gly Asp Leu Thr Cys Arg Thr Trp Thr Cys Gln His Arg Ser Leu

1 5 10 15

Leu Thr Leu Pro Val Cys Gly Phe Leu Pro Ser Cys Ala Pro Trp Leu 20 25 30

Arg Arg Pro Gly Asn Ser Ser Leu Gly Ile Pro Ala Glu Gln Leu Leu
35 40 45

Gly Leu Gly Tyr Thr Ser Gln Trp Glu Gly Leu Ala Trp Gly Leu Arg
50 55 60

Ala Arg Gly Gly Val Val Gly Gly Val Cys Leu Thr Ser Lys Asn Leu 65 70 75 80

Leu Gln Ile Arg Glu Asn Met Lys Glu Leu Asp Phe Gly Phe Pro Gly
85 90 95

Leu Pro Asp Leu Val Ala Leu Gly Ser Gly Asp Ile Trp Arg Leu Ile
100 105 110

Leu Cys Ser Arg Asp Lys Asn Pro Leu His Ala His Ser Leu Phe Pro
115 120 125

Leu Asn Arg Glu Lys Leu Gly Leu Glu Asp Thr Ala Pro Thr Ser

130 135 140

<210> 3525

<211> 313

<212> PRT

<213> Homo sapiens

<400> 3525

Met Gly Ala Glu Ala Ser Ser Ser Trp Cys Pro Gly Thr Ala Leu Pro

1 5 . 10 15

Glu Glu Arg Leu Ser Val Lys Arg Ala Ser Glu Ile Ser Gly Phe Leu

20 25 30

Gly Gln Gly Ser Ser Gly Glu Ala Ala Leu Asp Val Leu Thr His Val

35 40 45

Leu Glu Gly Ala Gly Asn Lys Leu Thr Ser Ser Cys Gly Lys Pro Ser

50 55 60

Ser Asn Arg Met Ser Leu Gln Trp Thr Ala Val Ala Thr Phe Leu Tyr

65 70 75 80

Ala Glu Val Phe Val Val Leu Leu Cys Ile Pro Phe Ile Ser Pro

85 90 95

Lys Arg Trp Gln Lys Ile Phe Lys Ser Arg Leu Val Glu Leu Leu Val

100 105 110

Ser Tyr Gly Asn Thr Phe Phe Val Val Leu Ile Val Ile Leu Val Leu

115 120 125

Leu Val Ile Asp Ala Val Arg Glu Ile Arg Lys Tyr Asp Asp Val Thr

130 135 140

Glu Lys Val Asn Leu Gln Asn Asn Pro Gly Ala Met Glu His Phe His

145 150 155 160

Met Lys Leu Phe Arg Ala Gln Arg Asn Leu Tyr Ile Ala Gly Phe Ser Leu Leu Leu Ser Phe Leu Leu Arg Arg Leu Val Thr Leu Ile Ser Gln Gln Ala Thr Leu Leu Ala Ser Asn Glu Ala Phe Lys Lys Gln Ala Glu Ser Ala Ser Glu Ala Ala Lys Lys Tyr Met Glu Glu Asn Asp Gln Leu Lys Lys Gly Ala Ala Val Asp Gly Gly Lys Leu Asp Val Gly Asn Ala Glu Val Lys Leu Glu Glu Glu Asn Arg Ser Leu Lys Ala Asp Leu Gln Lys Leu Lys Asp Glu Leu Ala Ser Thr Lys Gln Lys Leu Glu Lys Ala Glu Asn Gln Val Leu Ala Met Arg Lys Gln Ser Glu Gly Leu Thr Lys Glu Tyr Asp Arg Leu Leu Glu Glu His Ala Lys Leu Gln Ala Ala Val Asp Gly Pro Met Asp Lys Lys Glu Glu

<210> 3526

<211> 151

<212> PRT

<213> Homo sapiens

<400> 3526

Met Glu Pro Ala Leu Arg Trp Arg Thr Gln Thr Leu Ser Leu Lys Gly

Arg Arg Arg Thr Gly Asn Ser Trp Ala His Pro Arg Asp Lys Arg His Arg Leu Asn Ile Ser Pro Pro Pro Ser Pro Thr Asn Leu Pro Arg Arg Pro Ala Pro Thr Pro Pro Pro Arg Pro Asp Pro Pro Leu Ala Val Gly Val Thr Gln Gly Gln Arg Leu Arg Val Pro Gly Asp Lys Val Gly His Ser Ser Ser Leu His Pro Gly Pro Arg Asn Thr His Gln Arg Thr Ala · 85 Val Arg Gly Arg Thr Arg Ala Cys Val Cys Val Cys Val Cys Val Arg Ala Arg Ala Arg Ala His Thr Gly Gln Gly Ser Leu Ile Arg Asn Ala Gly Gly Thr Ser Ser Val Ser Asp Phe Arg Phe Phe His Ile Ser Glu Cys Leu His Tyr Ile Val Ser

<210> 3527

<211> 361

<212> PRT

<213> Homo sapiens

<400> 3527

Met Cys Val Trp Arg Leu Ile Leu Asp Ala Val Asp Gly Arg Glu Cys

1 5 10 15

His	His	Leu	Val	His	Cys	Tyr	Met	Pro	Gln	Glu	Ile	Ile	Ala	Gln	Pro
			20			-		25	-				30	-	
Phe	Leu	Asn	Phe	Lys	Val	Phe	Leu	Phe	Asn	Arg	Phe	Cys	Thr	Asp	Cys
		35					40					45			
Lys	Asn	Lys	Val	Leu	Arg	Ala	Tyr	Asn	Ile	Leu	Ile	Gly	Glu	Leu	Asp
	50					55					60				
Cys	Ser	Lys	Glu	Lys	Gly	Tyr	Cys	Ala	Ala	Leu	Tyr	Glu	Gly	Leu	Arg
65					70					75					80
Cys	Cys	Pro	His	Glu	Arg	His	Ile	His	Val	Cys	Cys	Glu	Thr	Asp	Phe
				85					90					95	
Ile	Ala	His	Leu	Leu	Gly	Arg	Ala	Glu	Pro	Glu	Phe	Ala	Gly	Gly	Arg
			100					105.					110		
Arg	Glu	Arg	His	Ala	Lys	Thr	Ile	Asp	Ile	Ala	Gln	Glu	Glu	Val	Leu
		115					120					125			
Thr	Cys	Leu	Gly	Ile	His	Leu	Tyr	Glu	Arg	Leu	His	Arg	Ile	Trp	Gln
	130					135					140				
Lys	Leu	Arg	Ala	Glu	Glu	Gln	Thr	Trp	Gln	Met	Leu	Phe	Tyr	Leu	Gly
145					150					155					160
Val	Asp	Ala	Leu	Arg	Lys	Ser	Phe	Glu	Met	Thr	Val	Glu	Lys	Val	Gln
				165					170					175	
Gly	Ile	Ser	Arg	Leu	Glu	Gln	Leu	Cys	Glu	Glu	Phe	Ser	Glu	Glu	Glu
			180					185					190		
Arg	Val	Arg	Glu	Leu	Lys	Gln	Glu	Lys	Lys	Arg	Gln	Lys	Arg	Lys	Asn
		195					200					205			
Arg	Arg	Lys	Asn	Lys	Cys	Val	Cys	Asp	Ile	Pro	Thr	Pro	Leu	Gln	Thr
	210					215					220				
Ala	Asp	Glu	Lys	Glu	Val	Ser	Gln	Glu	Lys	Glu	Thr	Asp	Phe	Ile	Glu
225					230					235					240
Asn	Ser	Ser	Cys	Lys	Ala	Cys	Gly	Ser	Thr	Glu	Asp	Gly	Asn	Thr	Cys

245 250 255 Val Glu Val Ile Val Thr Asn Glu Asn Thr Ser Cys Thr Cys Pro Ser 265 260 270 Ser Gly Asn Leu Leu Gly Ser Pro Lys Ile Lys Lys Gly Leu Ser Pro 275 280 285 His Cys Asn Gly Ser Asp Cys Gly Tyr Ser Ser Met Glu Gly Ser 290 295 300 Glu Thr Gly Ser Arg Glu Gly Ser Asp Val Ala Cys Thr Glu Gly Ile 305 310 315 320 Cys Asn His Asp Glu His Gly Asp Asp Ser Cys Val His His Cys Glu 325 330 335 Asp Lys Glu Asp Asp Gly Asp Ser Cys Val Glu Cys Trp Ala Asn Ser 340 345 350 Glu Glu Asn Asp Thr Lys Gly Lys Asn 355 360

<210> 3528

<211> 130

<212> PRT

<213> Homo sapiens

<400> 3528

Met Arg Pro Gln Ser Phe Arg Ser Arg Pro Trp Gly Val Arg Ala Pro

1 5 10 15

Pro Gly Asn Thr Val Arg Pro Gln Arg Leu Gln Pro Lys Leu Ala Arg
20 25 30

Ser Met Gly Gln Val Pro Leu Cys Leu Glu Lys Pro Gly Ala Leu Leu 35 40 45

Pro Cys Pro Pro Glu Pro Thr Ala Gly Arg Thr Pro Pro Ala Pro Pro His Pro Val Ala Arg Asp Pro Ser Glu Asn Ser Glu Ala Gly Pro Arg Ala Val Pro Ala Gly Ala Arg Pro Val Gly Arg Thr Gln Pro Arg Asn Gln Leu Pro Glu Thr Arg Val Pro Leu Gly Cys Pro Pro Ala Trp Arg Arg Pro Gln Ala Arg Ser His Pro Phe Pro Glu Leu Gln Asp Arg Ala Ser Ser <210> 3529 <211> 327 <212> PRT <213> Homo sapiens <400> 3529 Met Gly Ile Cys Phe Glu Glu Lys Ser Cys Lys Cys Phe Cys Leu Ile Phe Ile Ala Leu Gly Met Val Pro Pro Pro Glu Asn Val Arg Met Asn Ser Val Asn Phe Lys Asn Ile Leu Gln Trp Glu Ser Pro Ala Phe Ala Glu Gly Asn Leu Thr Phe Thr Ala Gln Tyr Leu Ser Tyr Arg Ile Phe Gln Asp Lys Cys Met Asn Thr Thr Leu Thr Glu Cys Asp Phe Ser Ser

65					70					75					80
Leu	Ser	Ĺys	Tyr	Gly	Asp	His	Thr	Leu	Arg	Val	Arg	Ala	Glu	Phe	Ala
				85					90					95	
Asp	Glu	His	Ser	Asp	Trp	Val	Asn	Ile	Thr	Phe	Cys	Pro	Val	Asp	Asp
			100					105					110		
Thr	Ile	Ile	Gly	Pro	Pro	Gly	Met	Gln	Val	Glu	Val	Leu	Ala	Asp	Ser
		115					120					125			
Leu	His	Met	Arg	Phe	Leu	Ala	Pro	Lys	Ile	Glu	Asn	Glu	Tyr	Glu	Thr
	130					135					140				
Trp	Thr	Met	Lys	Asn	Val	Tyr	Asn	Ser	Trp	Thr	Tyr	Asn	Val	Gln	Tyr
145					150					155					160
Trp	Lys	Asn	Gly	Thr	Asp	Glu	Lys	Phe	Gln	Ile	Thr	Pro	Gln	Tyr	Asp
				165					170					175	
Phe	Glu	Val	Leu	Arg	Asn	Leu	Glu	Pro	Trp	Thr	Thr	Tyr	Cys	Val	Gln
			180					185					190		
Val	Arg	Gly	Phe	Leu	Pro	Asp	Arg	Asn	Lys	Ala	Gly	Glu	Trp	Ser	Glu
		195					200					205			
Pro	Val	Cys	Glu	Gln	Thr	Thr	His	Asp	Glu	Thr	Val	Pro	Ser	Trp	Met
	210					215					220				
Val	Ala	Val	Ile	Leu	Met.	Ala	Ser	Val	Phe	Met	Val	Cys	Leu	Ala	Leu
225					230					235					240
Leu	Gly	Cys	Phe	Ala	Leu	Leu	Trp	Cys	Val	Tyr	Lys	Lys	Thr	Lys	Tyr
				245					250					255	
Ala	Phe	Ser	Pro	Arg	Asn	Ser	Leu	Pro	Gln	His	Leu	Lys	Glu	Phe	Leu
			260					265					270		
Gly	His	Pro	His	His	Asn	Thr	Leu	Leu	Phe	Phe	Ser	Phe	Pro	Leu	Ser
		275					280					285			
Asp	Glu	Asn	Asp	Val	Phe	Asp	Lys	Leu	Ser	Val	Ile	Ala	Glu	Asp	Ser
	290					295					300				

Glu Ser Gly Lys Gln Asn Pro Gly Asp Ser Cys Ser Leu Gly Thr Pro
305 310 315 320

Pro Gly Gln Gly Pro Gln Ser
325

<210> 3530

<211> 182

<212> PRT

<213> Homo sapiens

<400> 3530

Met Leu Glu Lys Gly Ala Leu Asp Leu Ala Thr Ser Gly Leu Cys Thr

1 5 10 15

Pro Gly Ala Glu Gly Thr Gln Gly Cys Thr Tyr Thr Leu Lys Ala Thr
20 25 30

Val Arg Thr Gly Glu Gln Gly Gln Arg Ala Met Glu Ser Pro Ala Glu 35 40 45

Gly Cys Thr Ser Arg Leu Lys Arg Ala Leu Pro Ala Ser Ala Arg Lys
50 55 60

Pro Gly Leu Trp Gly Cys Val Ile Val Asp Asp His Phe Gln Val Met
65 75 80

Ala Thr Ala Pro Val Leu Val Thr Ala Gly Pro Pro Ile Leu Leu Arg
85 90 95

His Pro Pro Leu Ser His Arg Ala Val Phe Arg Ala Ser Ala Gly Leu 100 105 110

Ser Cys Cys Ser Gln Thr Leu Ala Leu Arg Lys Ala Gly Gln Ser Thr
115 120 125

Ser Cys Ser Leu Arg Gly Gly Gln Val Phe Val Ser Lys Gly Gly Lys

130 135 140

Pro Gly Glu Arg Arg His Gln Ala Pro Glu Thr Phe Glu Met Thr Ser

145 150 155 160

Glu Asp Pro Gly Pro Leu Arg Val Thr Thr Ser Asp Ser Cys Leu Pro

165 170 175

Gln Ala Val Thr Asp Val

180

<210> 3531

<211> 430

<212> PRT

<213> Homo sapiens

<400> 3531

Met Phe Asp Gly Tyr Asp Ser Cys Ser Glu Asp Thr Ser Ser Ser Ser

1 5 10 15

Ser Ser Glu Glu Ser Glu Glu Glu Val Ala Pro Leu Pro Ser Asn Leu

20 25 30

Pro Ile Ile Lys Asn Asn Gly Gln Val Tyr Thr Tyr Pro Asp Gly Lys

35 40 45

Ser Gly Met Ala Thr Cys Glu Met Cys Gly Met Val Gly Val Arg Asp

50 55 60

Ala Phe Tyr Ser Lys Thr Lys Arg Phe Cys Ser Val Ser Cys Ser Arg

65 70 75 80

Ser Tyr Ser Ser Asn Ser Lys Lys Ala Ser Ile Leu Ala Arg Leu Gln

85 90 95

Gly Lys Pro Pro Thr Lys Lys Ala Lys Val Leu Gln Lys Gln Pro Leu

100 105 110

Val	Ala	Lys	Leu	Ala	Ala	Tyr	Ala	Gln	Tyr	Gln	Ala	Thr	Leu	Gln	Asn
	-	115	-				120	-	-	-		125			- '
Gln	Ala	Lys	Thr	Lys	Ala	Ala	Val	Ser	Met	Glu	Gly	Phe	Ser	Trp	Gly
	130					135					140				
Asn	Tyr	Ile	Asn	Ser	Asn	Ser	Phe	Ile	Ala	Ala	Pro	Val	Thr	Cys	Phe
145					150					155					160
Lys	His	Ala	Pro	Met	Gly	Thr	Cys	Trp	Gly	Asp	Ile	Ser	Glu	Asn	Val
				165					170					175	
Arg	Val	Glu	Val	Pro	Asn	Thr	Asp	Cys	Ser	Leu	Pro	Thr	Lys	Val	Phe
			180					185					190		
Trp	Ile	Ala	Gly	Ile	Val	Lys	Leu	Ala	Gly	Tyr	Asn	Ala	Leu	Leu	Arg
		195					200					205			
Tyr	Glu	Gly	Phe	Glu	Asn	Asp	Ser	Gly	Leu	Asp	Phe	Trp	Cys	Asn	Ile
	210					215					220				
Cys	Gly	Ser	Asp	Ile	His	Pro	Val	Gly	Trp	Cys	Ala	Ala	Ser	Gly	Lys
225					230					235					240
Pro	Leu	Val	Pro	Pro	Arg	Thr	Ile	Gln	His	Lys	Tyr	Thr	Asn	Trp	Lys
				245					250					255	
Ala	Phe	Leu	Val	Lys	Arg	Leu	Thr	Gly	Ala	Lys	Thr	Leu	Pro	Pro	Asp
			260					265					270		
Phe	Ser	Gln	Lys	Val	Ser	Glu	Ser	Met	Gln	Tyr	Pro	Phe	Lys	Pro	Cys
		275					280					285			
Met	Arg	Val	Glu	Val	Val	Asp	Lys	Arg	His	Leu	Cys	Arg	Thr	Arg	Val
	290					295					300				
Ala	Val	Val	Glu	Ser	Val	Ile	Gly	Gly	Arg	Leu	Arg	Leu	Val	Tyr	Glu
305		•			310					315					320
Glu	Ser	Glu	Asp	Arg	Thr	Asp	Asp	Phe	Trp	Cys	His	Met	His	Ser	Pro
				325					330					335	
Ī AII	Ιle	Hie	Hie	Tle	Glv	Trp	Ser	Arg	Ser	Tle	Glw	Hie	Ara	Phe	Tve

Arg Ser Asp Ile Thr Lys Lys Gln Asp Gly His Phe Asp Thr Pro Pro His Leu Phe Ala Lys Val Lys Glu Val Asp Gln Ser Gly Glu Trp Phe Lys Glu Gly Met Lys Leu Glu Ala Ile Asp Pro Leu Asn Leu Ser Thr Ile Cys Val Ala Thr Ile Arg Lys Val Thr Gln Asn Phe Leu Leu Asn Gly Leu Thr Thr Ser Gly Lys Leu Ala Pro Leu Gln His Gln

<210> 3532

<211> 148

<212> PRT

<213> Homo sapiens

<400> 3532

Met Val Glu Gly Arg Arg Ala Leu Leu Gly Ala Trp Glu Ala Gly Phe Arg Ala Ala Trp Ala Val Pro Pro Glu Gly Gln Asp Pro Thr Gly Gly Ala Arg Ala Ala Thr Pro Gln Thr Asn Glu Phe Lys Gly Ala Thr Glu Glu Ala Pro Ala Lys Glu Ser Pro His Thr Gly Glu Phe Lys Gly Ala Ala Leu Val Ser Pro Ile Ser Lys Arg Met Leu Glu Arg Leu Ser Lys

Phe Glu Val Gly Asp Ala Glu Asn Val Ala Ser Tyr Glu Leu Phe Gly 85 90 95 Val Phe Leu Val Leu Leu Asp Val Thr Leu Val Leu Ala Asp Leu Ile 105 100 110 Phe Thr Asp Ser Lys Leu Tyr Ile Pro Leu Glu Tyr Arg Ser Ile Ser 120 125 115 Leu Ala Ile Ala Leu Phe Phe Leu Met Asp Val Leu Leu Arg Val Phe 130 135 140 Val Glu Gly Phe 145

<210> 3533

<211> 199

<212> PRT

<213> Homo sapiens

<400> 3533

Met His Ala Cys Val Asn Thr Pro Gly Ser Tyr Arg Cys Thr Cys Pro

1 5 10 15

Gly Gly Tyr Arg Thr Leu Ala Asp Gly Lys Ser Cys Glu Asp Val Asp

20 25 30

Glu Cys Val Gly Leu Gln Pro Val Cys Pro Gln Gly Thr Thr Cys Ile
35 40 45

Asn Thr Gly Gly Ser Phe Gln Cys Val Ser Pro Glu Cys Pro Glu Gly
50 55 60

Ser Gly Asn Val Ser Tyr Val Lys Thr Ser Pro Phe Gln Cys Glu Arg
65 70 75 80

Asn Pro Cys Pro Met Asp Ser Arg Pro Cys Arg His Leu Pro Lys Thr

95 85 90 Ile Ser Phe His Tyr Leu Ser Leu Pro Ser Asn Leu Lys Thr Pro Ile 100 105 110 Thr Leu Phe Arg Met Ala Thr Ala Ser Ala Pro Gly Arg Ala Gly Pro 120 125 115 Asn Ser Leu Arg Phe Gly Ile Val Gly Gly Asn Ser Arg Gly His Phe 130 135 140 Val Met Gln Arg Ser Asp Arg Gln Thr Gly Asp Leu Ile Leu Val Gln 145 150 155 160 Asn Leu Glu Gly Pro Gln Thr Leu Glu Val Asp Val Asp Met Ser Glu 175 165 170 Tyr Leu Asp Arg Ser Phe Gln Ala Asn His Val Ser Lys Val Thr Ile 190 180 185 Phe Val Ser Pro Tyr Asp Phe 195 <210> 3534

<211> 100

<212> PRT

<213> Homo sapiens

<400> 3534

Met Ile Leu Leu Glu Thr Arg Pro Ala Ser Thr Cys Pro Pro Trp Ser

1 5 10 15

Gln Glu Ala Leu Glu Glu Lys Cys Ser Ile Leu Asp Asp Phe Pro Arg
20 25 30

Pro Leu Cys Cys Gln Gln Trp Arg His Pro Glu Leu Ala Glu Val Gly

35 40 45

Thr Ser Tyr Leu Lys Pro Asn Lys Cys Ser Pro Ser Gly Pro Asn Pro Gln Cys Leu Ala Leu Cys Leu Leu Ala Leu Ala Leu Thr Ile Gly Ala Ile His Thr Ala Ile Leu Glu Gly Arg Gly His Ser Pro Ser Ser Lys Lys Glu Asp Gly <210> 3535 <211> 176 <212> PRT <213> Homo sapiens <400> 3535 Met Ser Met Met Ser Ser Arg Lys Thr Met Lys Ala Thr Ile Pro Pro Met Met Ala Cys Pro Ala His Leu Arg Ile Phe Leu Glu Glu Asp Ala Val Ala Pro Ser Thr Thr Arg Arg Gln His Trp Lys Gln Thr Gln Ser Asn Arg Thr Pro Ser Ala Trp Leu Leu Ser Thr Lys Gln Arg Gly Asp Gln Gln Asp Thr Asn His Lys Gly Thr Arg Thr Phe Ser His Cys Gln Ser Ser Ser Asp Trp Ser Gly Glu Ile Trp Gly Gln Arg Pro Glu Leu

Ser Ala Leu Ser Leu Leu Leu Ala Ser Tyr Asn Ser Leu Val Val Leu

100 105 110 Arg Gln Leu Pro His Ala Glu Val Cys Pro Trp Ser Gly Asn His Pro 115 120 125 Ser Arg His Ser Asp Pro Lys Asn Ser Asp Leu Leu Ser Leu Gly Gly 135 140 130 Leu Ala Leu Ile Pro Ser Thr Val Leu Met Ser Val Ser Ser Lys Gly 150 155 160 145 Ala Ser Asp Val Ser Pro Thr Met His Phe Pro Tyr Ser Glu Lys Arg 165 170 175

<210> 3536

<211> 203

<212> PRT

<213> Homo sapiens

<400> 3536

Met Asp Ser Ala Pro Ala Gly Ser Phe Ser Ala Ser Ser Phe Phe Asp

1 5 10 15

Leu Ser Val Thr Val Thr Arg Ala Lys Asn Ser Arg Gly Pro Ser Ser
20 25 30

Ser Pro Ser Glu Leu Gln Gly Ala His Cys Leu Thr Ser Ser Leu Ala 35 40 45

Ala Ala Cys Ser Val Ala Tyr Ser Ala Leu Trp Ser Ser Ser Pro Leu
50 55 60

Arg Ser Pro Trp Ser Ile Ser Ser Ile Thr Met Pro Arg Leu Ser Ser 65 70 75 80

Glu Glu Ser Ser Ala Ser Leu Leu Ala Gly Ala Asp Gly Arg Pro Pro 85 90 95 Arg Leu Leu Phe Leu Pro Phe Trp Val Asn Leu Leu Arg Leu Val Leu 100 105 110 Phe Leu Arg Pro Arg Pro Leu Leu Gly Phe Leu Ala Ala Pro Arg 120 115 125 Ser Glu Pro Ala Cys Pro Val Thr Ser Pro Glu Ser Trp Ala Cys Val 130 135 140 Ser Glu Ala Gly Gly Val Gly Ala Ser Pro Gly Val Pro Ala Ser Ala 150 160 145 155 Ala Cys Val Gly Pro Ser Ser Ser Ser Arg Arg Leu Ile Cys Leu Arg 170 165 175 Thr Leu Val Ser Cys Ala Arg Ser Phe His Arg Thr Leu Gln Thr Pro 180 185 190 Ser Leu Pro Gly Ile Ser Leu Gly Met Ala Ala 195 200

<210> 3537

<211> 536

<212> PRT

<213> Homo sapiens

<400> 3537

Met Ser Ala Arg Val Pro Val Ser Phe Cys Ile Tyr Ile His Ala Cys

1 5 10 15

Val Pro Val Phe Leu Arg Val Leu Val Cys Ala Arg Val His Leu Cys
20 25 30

Val Cys Gln Ser Met Cys Ala Cys Val Cys Leu Ser Ala Tyr Pro Cys

35 40 45

Val His Val Cys Val Cys Gln Arg Ile Arg Val Cys Met Cys Val Ser